

**BOROUGH OF DARWEN.**



**REPORT**

OF

**F. G. HAWORTH,**

M.B.C.M., L.R.C.S., D.P.H.I.,

**MEDICAL OFFICER OF HEALTH,**

Medical Officer to the Education Committee,

**POLICE SURGEON,**

FOR THE

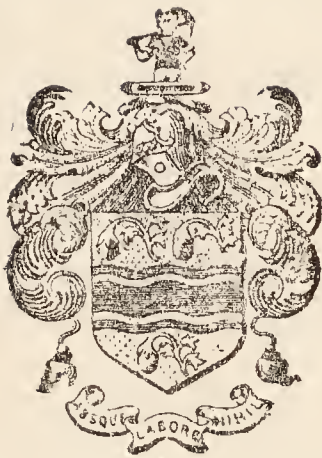
**Year ending December 31st, 1918.**

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MCMXIX.





"BROOKLYN," DARWEN,

FEBRUARY, 1919.

**TO THE CHAIRMAN AND MEMBERS OF THE  
HEALTH COMMITTEE.**

GENTLEMEN,

I have the honour to present to you my Twenty-Fourth Annual Report, being for the year ending December 31st, 1918.

I am, Gentlemen,

Your obedient servant,

**F. G. HAWORTH,**

Medical Officer of Health,

Darwen Urban Sanitary Authority.



# Members of the Health Committee.

1918-1919.

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ALDERMAN W. WORTH, J.P., MAYOR.

**Chairman :**

ALDERMAN W. WORTH, J.P.

**Vice-Chairman :**

COUNCILLOR G. P. HOLDEN, J.P.

ALDERMAN A. CARUS, J.P., C.C.

„ J. COCKER, J.P.

„ A. T. ECCLES, J.P.

„ J. PICKUP, J.P.

„ J. TOMLINSON, J.P.

COUNCILLOR WM. AINSWORTH.

„ CROSSLEY ST. JOHN BROAD-  
BENT.

„ G. BUTTERWORTH.

„ T. P. DAVIES, J.P.

„ T. DUXBURY.

COUNCILLOR E. GIBSON.

„ F. HINDLE, J.P., C.C.

„ J. HODKINSON.

„ T. E. HOLGATE.

„ G. HUNT.

„ H. C. JEPSON.

„ M. MEEHAN.

„ R. MARSDEN.

„ J. PARKINGTON.

„ G. PICKUP.

„ JOHN B. THORNLEY.

TOWN CLERK.....WILLIAM P. HALLIWELL. B.A.

ASSISTANT TOWN CLERK.....JOHN DERBYSHIRE.

NUISANCE INSPECTORS.....(South Division)—W. E. MARSDEN.  
(North Division)—C. R. WALSH.

SUPERINTENDENT OF SCÄVENGING.....JOSEPH NICCOLL.

SLAUGHTER HOUSE AND MEAT INSPECTOR.....WILLIAM BICKERSTAFFE.

MEDICAL OFFICER OF INFECTIOUS DISEASES HOSPITAL.....F. G. HAWORTH.

SCHOOL NURSE.....MISS E. MYCOCK.

LADY HEALTH VISITOR.....MISS H. H. SHAWCROSS.

# REPORT.

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## Natural and Social Condition of the Districts.

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The town of Darwen is situated in a valley, Latitude  $53^{\circ} 41' 25''$  N. and Longitude  $2^{\circ} 28' 32''$  W., and runs almost due north and south, being about five miles in extent, on the highway between Blackburn on the North and Bolton on the South. The centre of the town stands 500 feet above the sea level, the higher parts of the town reaching over 800 feet above sea level, its situation favouring the free circulation of air and free exposure to sunlight.

The soil on which the town is built consists of boulder clay overlaying the sandstone or shale of the coal measures. In the middle of the valley along the river-side, gravel and sand form the subsoil, the land rises up on each side of the moorland, that on the West side forming the gathering ground.

There is only one outlying district of any importance, viz. : Hoddlesden, situate at a distance of two miles to the east, with a population of about 613.

The River Darwen runs northward through the valley.

The inhabitants are chiefly of the artizan and labouring classes. Area of town 5,919 acres. Rateable value, end of the year to the Borough Rate, £174,107 0s. 0d. Assessable Value to the District Rate, £160,083 19s. 6d.

The town is divided into six Wards :—Central, West Central, North East, North West, South East and South West.

The population, based on the Registrar General's return, is estimated for the middle of 1918 at 32,856 for Death-Rate and 36,814 for Birth-Rate.

### MEDICAL RELIEF

The Darwen District Nursing Association was instituted in 1890, under the auspices of the late Lady Huntington. It is carried on by voluntary contributions collected in the Mills, Churches, Chapels and from private sources, under a Management Committee, consisting of thirty ladies and gentlemen. There is a General Committee of eighty-five ladies and gentlemen.



Amount Collected.			
Year.	£	s.	d.
1905.....	621	0	0
1911.....	1286	0	0
1912.....	665	0	0
1913.....	990	16	4
1914.....	1070	2	5
1915.....	759	13	11
1916.....	670	17	1
1917.....	559	8	4
1918.....	799	0	9

Amount Expended.			
Year.	£	s.	d.
1905.....	549	0	0
1911.....	1051	0	0
1912.....	722	0	0
1913.....	930	18	11
1914.....	891	15	1
1915.....	688	13	11
1916.....	607	11	5
1917.....	615	12	0
1918 .....	751	16	4

There are about six Nurses, including those doing Maternity Work. The work is done under the close supervision of the local medical men and is of a very high character.

The following are the terms of payment, at a minimum charge of :—

10/- per week, for one visit per day.

15/- per week, for two visits per day.

The Maternity Nurse attends for 7/6 to 15/- per case, according to the income of the patient. When the person is too poor to pay, of course, no charge is made.

### **POOR LAW ADMINISTRATION**

Comes under the Blackburn Union, which consists of sixty members, of which eight are sent from and represent Darwen.

The accounts of the Guardians do not show the whole amounts expended in respect of each Township.

### **THE BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY**

Is an Institution standing at the Southern end of the neighbouring County Borough of Blackburn.

Darwen has not a particular number of beds at its disposal ; every case sent from here is admitted without question.

Collections are made twice a year in the Mills, workshops, Churches and Chapels, and other sources contribute.

The Secretary, Mr. Nathan A. Smith, supplied the following information of patients from Darwen treated in the Institution.

	1910	1911	1912	1913	1914	1915	1916	1917	1918
In-Patients .....	210	225	221	242	242	259	281	247	276
Out-Patients . . . . .	484	402	449	460	498	565	621	623	663

Based upon the ordinary expenditure for the year, the Cost of Treatment of these Patients was £1,970.

# Population.

The following has been received from the Office of the Registrar-General, Somerset House :

" The Annual distribution of his Returns of Births and Deaths, and Estimates of Population for the past year affords the Registrar-General an opportunity of directing the attention of Medical Officers of Health and others using the returns, to some points upon which experience has shown that misunderstandings tend to arise.

1. The year to which these returns refer is the calendar year 1918. The number of births and deaths registered must differ slightly on this account from the records for the most nearly corresponding fifty-two weeks.

2. The ' Death-rate Population ' excludes all non-civilian males, whether serving at home or abroad. This is necessary for the purposes of local death-rates because it has proved impossible to transfer the deaths of non-civilians to their areas of residence or to deal in any other satisfactory manner with the local mortality of this element in the population. These estimates are based mainly upon the rationing returns kindly placed at the Registrar-General's disposal by the Ministry of Food.

The ' Birth-rate (and Marriage-rate) Population,' on the other hand, is intended to include all the elements of the population contributing to the Birth and Marriage Rates. It consists, therefore, of the Death-rate or civilian population *plus* all non-civilians enlisted from this country, whether serving at home or abroad. This non-civilian element has been distributed over all the districts in the country in proportion to their estimated civilian population.

3. The classification of some deaths is modified in the light of fuller information obtained from the certifying practitioner in response to special enquiries. The principal subjects of these enquiries are indicated in a table published in the Yearly Reports of the Registrar-General, and this possible source of discrepancy between the returns of the Registrar-General and those compiled locally should be borne in mind particularly in the cause of death dealt with in that Table.

Estimated Civil Population for Death Rate 32,856, and for Birth Rate 36,814.

WARDS.	Census, 1911.	Estimated for Middle of 1917.		Estimated for Middle of 1918.	
		Death Rate.	Birth Rate.	Death Rate.	Birth Rate
CENTRAL .....	6,698	5,537	6,172	5,307	5,946
WEST CENTRAL .....	3,947	3,366	3,701	3,226	3,566
NORTH EAST .....	9,181	7,692	8,587	7,373	8,273
NORTH WEST .....	7,055	6,443	7,195	6,176	6,932
SOUTH EAST ..	6,882	5,842	6,525	5,600	6,287
SOUTH WEST.....	6,569	5,398	6,030	5,174	5,810
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BOROUGH .....	40,332	34,278	38,210	32,856	36,814



The Census Returns for 1911 give the following figures regarding Families or Separate Occupiers :—

WARDS.	1911
CENTRAL .....	1668
WEST CENTRAL .....	912
NORTH EAST .....	2165
NORTH WEST .....	1758
SOUTH EAST .....	1607
SOUTH WEST.....	1564
TOTAL .....	<u>9674</u>

## Births.

The Number of Children Born during the year was : Males 184, females 169, making a total of 353 ; being 74 fewer than in the previous twelve months, and at the rate of 1.60 per 1,000 lower than in 1917.

The Birth Rate for the year was 9.58 per 1,000. In July and October there was the highest birth rate, viz. : 10.25 per 1,000 ; and in February it was the lowest, the figure being 6.19 per 1,000.





**TABLE showing the Estimated Populations, Number of Births, and the Birth-Rates for the Darwen Sanitary District since 1882 inclusive.**

Year.	Estimated Population at the Middle of Each Year.	Total Births	Birth-Rate
1801	3,587	...	...
1811	4,411	...	...
1821	6,711	...	...
1831	6,972	...	...
1841	9,348	...	...
1851	11,702	...	...
1861	16,492	...	...
1871	21,277	...	...
1881	27,589	...	...
1882	30,295	987	32.57
1883	30,733	1057	34.39
1884	31,360	978	31.18
1885	31,720	1015	31.99
1886	32,185	965	29.98
1887	32,491	1000	30.77
1888	33,500	994	29.67
1889	34,500	972	28.17
1890	36,500	1075	29.45
1891	34,192	1115	32.60
1892	35,000	1057	30.20
1893	35,500	955	26.90
1894	36,000	1039	28.86
1895	36,000	1128	31.33
1896	36,652	1032	28.15
1897	37,500	1114	29.70
1898	37,500	1131	30.16
1899	37,900	1062	28.02
1900	38,600	980	25.38
1901	38,212	858	22.45
1902	38,712	891	23.01
1903	39,114	941	24.05
1904	39,516	820	20.75
1905	39,918	818	20.49
1906	41,164	811	19.70
1907	41,864	876	20.92
1908	42,266	895	21.17
1909	42,668	816	19.12
1910	43,000	776	18.05
1911	40,398	756	18.71
1912	40,611	690	16.99
1913	40,824	738	18.08
1914	41,038	765	18.64
1915	41,038	666	16.23
1916	40,381	562	13.91
1917	38,210	447	11.18
1918	36,814	353	9.58

Average for the last 37 years, 24.39.

### BIRTH-RATES IN THE VARIOUS WARDS.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Borough.
1899	26.7	24.7	31.4	24.7	29.5	29.7	28.4
1900	23.37	28.29	25.00	28.35	24.58	27.13	25.79
1901	22.45	22.25	19.94	24.78	20.26	23.53	21.54
1902	24.8	19.1	24.2	21.4	20.9	24.6	23.0
1903	26.2	21.4	26.3	19.9	23.8	23.3	24.0
1904	19.3	18.8	22.4	25.4	19.8	18.4	20.7
1905	17.8	23.1	23.5	20.4	18.0	19.8	20.4
1906	19.23	19.25	21.11	19.82	17.47	20.53	19.70
1907	16.18	23.63	22.14	23.63	20.58	20.92	20.92
1908	17.72	20.65	22.89	23.41	23.34	18.97	21.17
1909	17.82	21.85	18.74	21.25	19.60	17.44	19.12
1910	14.76	20.35	20.57	22.61	17.77	13.63	18.05
1911	16.29	20.76	20.02	16.60	18.86	20.26	18.71
1912	16.49	17.94	18.69	16.00	14.86	17.90	16.99
1913	17.15	17.14	20.95	15.16	18.22	18.75	18.08
1914	19.91	19.62	18.65	16.43	19.26	18.68	18.64
1915	16.59	13.33	18.65	12.03	19.98	15.13	16.23
1916	14.10	9.97	14.98	11.05	14.64	17.26	13.91
1917	11.82	10.54	13.74	8.75	10.27	11.11	11.18
1918	8.74	9.81	10.15	9.08	9.54	10.17	9.58
Averages for 20 Years.	18.37	19.12	20.70	19.03	16.04	19.34	19.31

### ILLEGITIMATE BIRTHS.

16 Children were born out of wedlock during the year. This gives a rate of 4.53 % of total births of erroneously called "Love Babies." Since 1901 the average annual number is 23.

The rate per cent. of Births averages 3.19, and 1916 is the highest with 4.80.

The Infantile Mortality Rate of Illegitimates for the year was 188 and the average for the last 14 years was 194. The highest rate of Mortality was in 1911, when it was 348 per 1,000 births ; this was a particularly fatal year for infant life.

Table showing number of Illegitimate Births, etc., during the past 18 years.

Year.	Number of Births.	Rate % of Total Births.	No. of Deaths under 1 Year.	Death-rate per 1,000 Births.
1901	21	2.45	...	...
1902	22	2.47	...	...
1903	23	2.44	...	...
1904	33	4.02	...	...
1905	25	3.06	8	320
1906	28	3.45	6	214
1907	29	3.31	5	172
1908	18	2.01	6	333
1909	29	3.55	4	138
1910	16	2.06	5	313
1911	25	3.31	8	348
1912	18	2.61	3	167
1913	21	2.85	5	238
1914	28	3.66	2	71
1915	20	3.00	2	100
1916	27	4.80	0	0
1917	17	3.96	2	118
1918	16	4.53	3	188
Average .....	23	3.19	4	194

#### ILLEGITIMATE BIRTHS.

	Number.	Percentage of Births.
JANUARY .....	4	13.31
FEBRUARY .....	0	0.00
MARCH .....	1	3.85
APRIL .....	2	7.14
MAY .....	0	0.00
JUNE .....	1	3.85
JULY .....	1	3.33
AUGUST .....	1	3.57
SEPTEMBER .....	0	0.00
OCTOBER .....	0	0.00
NOVEMBER .....	1	3.23
DECEMBER.....	5	11.65
	16	4.53



### BIRTHS IN WARDS, 1918.

	Central.		West-Central.		North-East.		North-West.		South-East.		South-West.		Total.		Rate per 1,000 estimated Pop'lation
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January .....	2	4	1	..	4	4	4	3	5	1	...	2	16	14	9.77
February.....	3	...	1	1	2	2	...	2	2	3	2	1	10	9	6.19
March .....	2	1	3	1	2	4	...	2	3	...	5	3	15	11	8.47
April .....	3	3	1	2	1	3	4	1	3	3	2	2	14	14	9.12
May .....	2	4	1	1	3	4	2	2	2	5	6	...	16	16	10.43
June .....	2	2	4	2	2	3	3	3	1	...	1	3	13	13	8.47
July.....	1	2	3	3	3	4	4	2	2	6	2	1	15	18	10.75
August .....	3	2	...	...	5	4	3	4	1	2	1	3	13	15	9.12
September .....	5	...	...	...	3	1	1	...	4	3	2	5	15	9	7.82
October .....	...	2	1	3	8	2	2	4	2	4	2	3	15	18	10.75
November .....	1	2	4	..	5	4	4	3	1	...	1	6	16	15	10.01
December .....	4	2	2	1	5	6	6	4	6	1	3	3	26	17	9.77
	28	24	21	14	43	41	33	30	32	28	27	32	184	169	9.58
TOTAL.....	52		35		84		63		60		59		353		
Population ....	5,946		3,566		8,273		6,932		6,287		5,810		36,314		
Birth-rate .....	8.74		9.81		10.15		9.08		9.54		10.10		9.58		

The following Table shows the number of Births and the percentage of these attended by Medical Men during the last twenty-one years :—

Years.	No. of Births.	Attended by Medical Men.	
		Number.	Percentage.
1898	1131	815	72.06
1899	1062	653	61.48
1900	980	540	55.10
1901	858	420	48.95
1902	891	401	45.00
1903	941	461	48.99
1904	820	421	51.34
1905	818	411	50.24
1906	811	376	46.36
1907	876	394	44.97
1908	895	427	47.71
1909	816	389	47.67
1910	776	352	45.36
1911	756	350	46.30
1912	690	288	41.74
1913	738	363	49.19
1914	765	337	44.05
1915	666	269	40.39
1916	562	243	43.24
1917	427	173	40.51
1918	353	156	44.19

### RETURN OF VACCINATION FOR DARWEN, 1918.

MONTHS.	Successful Vaccination.	Died Unvaccinated.	Insusceptible.	Ex-empted.	Post-poned.	Re-moved out of Town and Traced.	Re-moved and Cannot Trace	Unaccounted for	Successfully vaccinated each quarter.
January	15	2	0	12	1	0	0	0	33
February	9	1	0	8	0	1	0	0	
March ...	9	1	0	13	0	1	1	1	
April .....	14	1	0	12	1	0	0	0	
May .....	8	2	0	20	1	0	0	1	29
June .....	7	1	0	17	0	1	0	1	
July .....	12	4	0	16	0	0	0	2	
August	7	3	1	19	0	0	0	0	
September	9	1	0	11	0	2	0	4	28
October...	12	3	0	15	0	1	1	2	
November	10	3	0	16	0	0	0	2	26
December	4	1	0	13	2	0	0	10	
	116	23	1	172	5	6	2	23	116

### VACCINATION.

Year.	Births.	Successfully Vaccinated.	Rate per cent. Vaccinated.
1899	1062	851	80.1
1900	980	705	71.9
1901	858	651	75.9
1902	891	765	85.9
1903	941	750	79.7
1904	820	662	80.7
1905	818	618	75.6
1906	811	593	73.1
1907	876	597	68.2
1908	895	447	49.9
1909	816	294	36.0
1910	776	275	35.4
1911	754	280	37.1
1912	690	204	29.57
1913	738	232	31.44
1914	765	271	35.42
1915	666	209	31.38
1916	562	200	35.58
1917	427	153	34.43
1918	353	116	32.86



## Marriages.

The number of Marriages solemnized in Darwen during the year ending December 31st, 1918, was as follows:—

Church of England.....	120
Nonconformist Places of Worship.....	116
Total.....	236

This means that 472 people were united in the bonds of wedlock, and is at the rate of 12.82 per 1,000 of the population, as compared with 11.37 per 1,000 in the previous year.

Year.	Births.		Deaths.		Marriages	
	Number.	Rate.	Number.	Rate.	Number.	Rate.
1882	987	32.57	650	21.45	490	16.0
1883	1057	34.39	518	16.85	478	15.5
1884	978	31.18	595	18.97	444	14.1
1885	1015	31.99	489	15.41	480	15.1
1886	965	29.98	641	19.91	540	16.7
1887	1000	30.77	716	22.03	558	16.6
1888	994	29.67	600	17.90	616	18.2
1889	972	28.17	544	15.76	570	16.5
1890	1075	29.45	673	18.43	586	16.0
1891	1115	32.60	660	19.30	648	18.7
1892	1057	30.20	641	18.31	670	19.1
1893	955	26.90	677	19.07	592	16.7
1894	1039	28.86	542	15.05	640	17.7
1895	1128	31.33	640	17.77	676	18.7
1896	1032	28.15	627	17.10	696	18.9
1897	1114	29.70	651	17.36	688	18.3
1898	1131	30.16	632	16.85	700	18.6
1899	1062	28.02	647	17.07	666	17.5
1900	980	25.38	789	20.44	532	13.7
1901	858	22.45	620	16.22	576	15.0
1902	891	23.01	569	14.69	606	15.6
1903	941	24.05	501	12.80	612	15.6
1904	820	20.75	606	15.33	606	15.3
1905	818	20.49	562	14.07	578	14.4
1906	811	19.70	540	13.11	744	18.0
1907	876	20.92	527	12.58	702	16.7
1908	895	21.17	550	13.01	636	15.1
1909	816	19.12	616	14.44	684	16.0
1910	776	18.05	573	13.33	610	14.2
1911	754	18.66	641	15.87	598	14.8
1912	690	16.99	563	13.86	710	17.5
1913	738	18.08	579	14.18	716	17.5
1914	765	18.64	595	14.49	594	14.4
1915	666	16.23	590	15.21	742	19.1
1916	562	13.91	545	14.68	510	13.7
1917	427	11.18	490	14.29	390	11.3
1918	353	9.58	692	21.08	472	12.8
Average 37 Years....	895	24.39	602	16.71	604	16.2



## HOUSE ACCOMMODATION

The number of houses at the end of the year was 10,487.

### HOUSING AND TOWN PLANNING ACT.

No. of Houses Inspected	No. of houses considered unfit for human habitation	No. of Representations made to Local Authority with a view to making closing orders	No. of closing orders made	No. of houses remedied without the making of closing orders	No. of houses remedied or being remedied after closing orders being served	Houses demolished		Demolition orders made
						Without demolition order	After demolition order	
226	0	0	0	0	0	0	0	0

The houses on the black list are being continually visited and examined. All known property is kept on the list of inspections with a view to black-listing them should they be allowed to pass the border line.

The minimum of yard space is 150 square feet.

There are 1,747 houses containing baths, and 6 new ones were put in during the year.

The streets are all paved with setts, and in the principal thoroughfares granite setts are used.

The side walks in the front streets are flagged, and are 7ft. 6in. wide.

### THE MODEL LODGING HOUSE.

The bed accommodation is 144, including females; the average number occupied was 54.39.

### WATER SUPPLY

Continues good, from a pure source, and every precaution is taken to prevent pollution.

The amount used during the year was 341,254,000 gallons; 56,200,000 being for trade purposes, the remainder for domestic use at the rate of 23.8 gallons per head per day.

The total Rainfall for the year on the Watershed was 57.08 inches, and in Bold Venture Park 64.99 inches. We had rain on 245 days.

The heaviest Rainfall was in September, with 14.84 inches, and the lowest in April, with 1.40 inches.

## SLAUGHTER HOUSES.

One Municipal and one private.

## CLOSET ACCOMMODATION.

The following constitutes the accommodation in this respect at the end of the year in question :—

Pails .....	1767
Water Closets .....	6378
Waste Water Closets .....	2478
Privies.....	2
<hr/>	
Total .....	10,625

Water Closets fixed in new buildings.....	1
Houses with one Closet .....	9
Pails converted to Water Closets .....	7
Baths installed during the year .....	6

## BYE-LAWS IN REGARD TO PREMISES AND OCCUPATION.

LODGING HOUSES.—The Municipal Model Lodging House is the only common lodging house in the town, and is frequently visited and inspected by Inspector Walsh.

The average daily number of lodgers for the year was 54.39, including women, as compared with 60.15 for the previous year, a decrease of 5.76.



The following Table gives a list of inspections, notices served and result, as required to be furnished to the Medical Officer under Article 20, Sec. 16 of Sanitary Officers' Order of 1910 :—

Nature of Inspections	Number of Inspections.	Number of Notices Served.		Result of Service of Notice.			
		Legal.	Preliminary.	Nuisances Abated.	Remaining in hand.	Prosecutions.	
						Instituted.	Pending
Dwelling Houses .....	1654 )						
Houses Town Planning Act	178 )	94	352	355	44	.....	.....
Factories and Workshops	272	2	10	6	3	.....	.....
Dairies and Cowsheds.....	215	5	19	23	4	.....	.....
Bakehouses .....	169	.....	2	2	.....	.....	.....
Infectious Diseases .....	463	.....	.....	.....	.....	2	.....
Smoke Observations .....	86	.....	.....	.....	.....	1	.....
NUISANCES.							
Defective Drains .....	43	9	35	39	4	.....	.....
„ Slop Gullies ....	29	4	27	23	6	.....	.....
„ Soilpipes, W.C.s etc. ....	21	3	19	19	2	.....	.....
„ Troughs and Downspouts .	113	29	89	100	13	.....	.....
Insanitary Yards.....	6	2	5	6	.....	.....	.....
Dirty Houses, etc.....	31	6	30	29	2	.....	.....
Dirty Closets.....	16	4	15	16	.....	.....	.....
Accumulation of Refuse...	38	5	37	32	6	.....	.....
Nuisance from Animals....	2	2	2	2	.....	.....	.....
Ashtubs without Covers and Broken .....	24	8	23	22	2	.....	.....
Broken Sloppipes .....	17	4	17	14	3	.....	.....
Choked Waste Water Cls.	25	6	24	23	2	.....	.....
Insufficient Closet Accom.	2	2	1	2	.....	.....	.....
Overcrowding .....	3	3	2	3	.....	.....	.....
Dirty Bedding, etc.....	2	2	1	2	.....	.....	.....
Dangerous and Dilapidated Closets .....	3	1	2	3		.....	.....
Manure Pits.....	7	1	6	6	1	.....	.....
Broken Closet Receptacle Doors.....	12	2	12	9	3	.....	.....
Miscellaneous .....	5	1	5	5	0	.....	.....

WILLIAM E. MARSDEN,

Cert. Royal San. Ins.



## SUMMARY OF INSPECTIONS

### Northern District

Number and Nature of Inspections made	No.	Notices Served		Nuis'nc's Abated	Nuis'nc's remain- ing in hand
		Legal	Prelim- inary		
Dwelling-houses .....	910	...	...	...	...
„ under Town Planning Act	48	...	...	...	...
Factories and Workshops .....	133	4	4	...	...
Dairies and Cowsheds.....	62	12	8	12	4
Bakehouses .....	110	2	6	6	...
INFECTIOUS DISEASES :—					
Cases Visited .....	453	...	...	...	...
Rooms Disinfected .....	49	...	...	...	...
Loads of Bedding Removed .....	61	...	...	...	...
Inspection of Refuse Tips.....	73	...	...	...	...
Smoke Observations .....	51	...	...	...	...
NUISANCES.					
Defective Drains.....	30	2	28	26	4
„ Slop Gullies .....	17	...	17	14	3
„ Soilpipes, W.C.'s, etc. ....	19	2	17	17	2
„ Troughs and Downspouts...	41	4	40	16	25
Insanitary Yards.....	1	...	1	1	...
Dirty Houses, etc. ....	6	3	...	5	1
Dirty Closets .....	6	...	6	5	1
Accumulation of Refuse.....	6	...	6	5	1
Nuisance from Animals .....	1	...	1	1	...
Dangerous Buildings .....	2	...	2	2	...
Ashtubs without covers .....	5	...	5	4	1
Broken Slop-pipes .....	14	...	10	14	...
Choked Waste Water Closets .....	35	...	35	33	2
Insufficient Ventilation of Rooms ...	4	4	4	3	1
Dirty Bedding.....	2	2	2	2	...
Choked Sewers.....	4	...	4	4	...
Burst Water Pipes .....	8	...	8	8	...
Defective Gas Pipes .....	1	...	1	1	...

C. R. WALSH, M.R. San. Inst.,

Sanitary Inspector.

# Notification of Infectious Diseases.

The following were reported to me during the year :—

Diphtheria .....	8
Erysipelas.....	12
Scarlet Fever .....	33
Typhoid Fever.....	1
Ophthalmia Neonatorum .....	1
Puerperal Fever .....	2
Cerebro-Spinal Meningitis .....	1
Tuberculosis .....	51
Measles and German Measles .....	807
Total .....	916

## CASES REPORTED IN—

Year.	Diphtheria and Croup	Erysipelas	Scarlet Fever	Typhoid Fever	Continued Fever	Puerperal Fever	Smallpox	Chicken-pox	Tuberculosis	Ophthalmia Neonatorum	Cerebro Spn Meningitis	Measles & Ger- man Measles	Total.
1887 (from Aug.)	...	...	145	14	...	...	1	...	...	...	...	...	160
1888	...	...	225	39	...	...	19	...	...	...	...	...	283
1889	...	...	158	20	...	...	2	...	...	...	...	...	180
1890	3	...	78	26	...	...	...	...	...	...	...	...	107
1891	1	...	39	50	...	...	...	...	...	...	...	...	90
1892	...	...	257	53	...	...	1	...	...	...	...	...	311
1893	5	5	242	29	...	...	6	...	...	...	...	...	287
1894	7	5	126	40	1	2	5	...	...	...	...	...	186
1895	11	27	46	36	2	8	...	...	...	...	...	...	130
1896	12	70	139	33	3	9	...	...	...	...	...	...	266
1897	5	56	101	41	1	12	...	...	...	...	...	...	216
1898	8	35	93	43	3	10	...	...	...	...	...	...	192
1899	12	31	400	55	...	7	...	...	...	...	...	...	505
1900	190	27	276	33	1	4	...	...	...	...	...	...	531
1901	207	34	231	21	3	1	...	...	...	...	...	...	497
1902	144	15	137	34	1	3	3	...	...	...	...	...	337
1903	21	17	30	15	...	2	27	32	...	...	...	...	144
1904	34	35	689	20	...	5	2	...	...	...	...	...	785
1905	29	49	456	28	...	5	...	...	...	...	...	...	567
1906	18	17	50	17	...	4	...	...	...	...	...	...	106
1907	22	14	26	21	...	...	1	...	...	...	...	...	84
1908	14	14	22	23	...	4	—	...	...	...	...	...	77
1909	11	7	149	15	...	3	...	...	11	...	...	...	196
1910	18	32	123	12	...	4	...	...	5	...	...	...	194
1911	32	16	39	9	...	2	...	...	3	...	...	...	101
1912	19	31	9	3	...	2	...	...	53	...	...	...	117
1913	26	15	28	2	...	1	...	...	91	...	...	...	163
1914	20	27	206	10	...	1	...	...	88	4	...	...	356
1915	16	18	158	6	...	2	...	...	84	7	1	...	292
1916	13	19	54	5	...	1	...	...	69	5	1	215	382
1917	5	11	55	5	...	1	...	...	59	2	...	127	265
1918	8	12	33	1	...	2	...	...	51	1	1	807	916

**DIPHTHERIA AND CROUP.** Of these diseases 8 cases were notified, as compared with 5 the year before; in 4 of these 5 swabs were taken and sent to Manchester University for examination.

In 4 cases the reaction was positive, and in the other negative,



## SCARLET FEVER.

Number of houses with one case .....	27
"                    " two cases .....	3

The distribution was as follows :—

		West Central.	North Central.	North East.	South West.	South East.	South East.
Population .....	5307	3226	7373	6176	5600	5174	
Number .....	5	0	9	3	13	3	

Table showing susceptible period :—

Under 1 Year.	1 to 5	5 to 15	15 to 25	25 to 65	Total
1	5	25	1	1	33

**TYPHOID FEVER.** There was 1 case notified during the year, as compared with five cases in previous year.

**OPHTHALMIA NEONATORUM.** Only one case was notified.

**PUERPERAL FEVER.** Two cases were notified.

**ERYSIPELAS.** There were 12 cases, as compared with 11 in the previous year.

**SMALL POX.** None.

**TUBERCULOSIS.** Under the regulations 51 cases were notified, as compared with 59 in the previous year. The following Table gives detailed particulars of them.

**Table showing Age Periods and Localisation of Tuberculosis Cases notified during 1918.**

DISEASES.	Under 1 year	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards		Total.	
	M F	M F	M F	M F	M F	M F	M F	M F	M	F	M	F
Abdomen .....				1								1
Cervical Glands .....				2	1						3	
Cervical Glands and Ribs .....								1				1
Ischio-Rectal Fossa and Lungs .....						1					1	
Kidney—Right .....					1						1	
Lungs.....					3	4	2	6	8	5	4	5
Peritoneum .....				1								1
Spine .....					1		1				2	
Spine and Psoas Abscess .....					1						1	
				1	3		7	4	4	6	8	5
											4	6
											1	2
											27	24
				1	3		11	10	13	10	3	
											51	



Forty-three deaths took place from Tuberculosis of one kind or another, being 5 less than in the previous year.

Pulmonary Tuberculosis headed the list with 32, Meningitis 4, other tuberculous diseases 7.

Thirty-one cases of Pulmonary Tuberculosis were sent to various sanatoria. Twenty-one of these were discharged before the end of the year, with the following results :—

In 3 cases—No report.  
 „ 15 „ Improvement  
 „ 1 „ No improvement  
 „ 2 „ Dead.  
 „ 4 „ Fit for full work  
 „ 3 „ Not fit for work.  
 „ 9 „ Fit for light work.

The Consumptive Patients from Darwen were sent to the following institutions :—

Elswick Sanatorium, Elswick.  
 Shelf Sanatorium.  
 Ainsworth Sanatorium.  
 Union Infirmary Sanatorium, Blackburn.  
 High Carley Sanatorium.  
 Bull Hill Sanatorium, Darwen.  
 Luneside Sanatorium, Lancaster.  
 Meathop Sanatorium, Grange.

During the year 58 patients were sent by the County Committee to Bull Hill Sanatorium.

	Cases Notified.	Deaths Registered.	Death Rate of those attacked.
Scarlet Fever .....	33	2	6.06
Diphtheria and Membraneous Croup .....	8	1	12.50
Typhoid Fever.....	1	0	0.00
Puerperal Fever .....	2	3	—
Erysipelas.....	12	0	0.00
Tuberculosis .....	51	43	84.31
Ophthalmia Neonatorum .....	1	0	0.00
Measles and German Measles .....	807	8	0.99
Cerebro-Spinal Meningitis .....	1	0	0.00
Total .....	916	57	—

Table showing the number of Pathological Specimens which have been sent for examination to Professor Delépine, Public Health Laboratory, Victoria University, Manchester.

YEAR.	Diphtheria.				Typhoid Fever.				Tuberculosis Sputum			Cerebro-Spinal Fever.					
												Spinal fluid			Swabs.		
	Posi- tive.	Nega- tive.	Doubt ful.	Total	Posi- tive.	Nega- tive.	Doubt ful.	Total	Posi- tive.	Nega- tive.	Total	Posi- tive.	Nega- tive.	Total	Posi- tive.	Nega- tive.	Total
1911.....	6	8	...	14	4	3	...	11	2	9	11	...	...	...	...	...	...
1912.....	7	4	...	11	...	7	...	...	7	11	18	...	...	...	...	...	...
1913.....	8	8	...	16	1	...	...	8	28	33	61	...	...	...	...	...	...
1914.....	4	9	1	14	6	7	...	8	65	57	122	...	...	...	...	...	...
1915.....	...	12	...	12	2	2	...	6	58	60	118	1	...	1	...	2	2
1916.....	6	7	...	13	1	4	1	6	74	50	124	...	1	1	...	3	3
1917.....	8	16	1	25	1	8	...	9	56	64	120	...	...	...	...	...	...
1918.....	4	4	1	9	2	1	...	3	42	76	118	...	...	...	...	...	...

### ZYMOTIC DEATH RATE.

1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901		
3.0	1.9	2.0	1.2	1.7	1.9	2.2	1.1	2.1	2.2	1.6	2.08	2.34	2.90	2.14		
1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
1.03	0.76	2.07	1.00	1.14	0.69	0.76	1.10	0.51	1.51	0.86	0.27	0.44	1.42	0.54	0.32	0.42



NOTIFICATION OF INFECTIOUS DISEASES IN EACH WARD, AND FOR  
EACH MONTH OF THE YEAR 1918.

MONTHS.	CENTRAL				WEST CENTRAL				NORTH-EAST				NORTH-WEST				SOUTH-EAST				SOUTH-WEST				BOROUGH.								Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Scarlet Fever.	Erysipelas.	Diphtheria.	Measles & G. Measles	Consumption.	Puerperal Fever.	Erysipelas.	Diphtheria.	Measles & G. Measles	Cere.-Sp. Meningitis	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Measles & G. Measles	Typhoid Fever.	Scarlet Fever.	Consumption.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.		Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.	Puerperal Fever.	Consumption.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Diphtheria.



## Deaths.

The total number of Deaths during the year was 692 ; males 309, females 383 ; being an increase of 202 on the previous year.

The Death Rate for the year is 21.08, an increase of 6.79 on the previous year.

The number of Deaths of Residents in Institutions outside the district was 86, which has been added to the 606 deaths registered within the district, making a total of 692.

These Deaths are reported to me quarterly by the Registrar General, through the County Medical Officer of Health.

The number of Deaths in the Union Workhouse, Blackburn, was .....	36
„ „ „ Royal Infirmary, Blackburn .....	22
„ „ „ other Institutions and Places .....	27

Twenty-three Deaths of Non-Residents occurred in the town during the year.

**INQUESTS.** There were 26 Inquests held during the year, compared with 22 during 1917. The following were the verdicts :—

	1910	1911	1912	1913	1914	1915	1916	1917	1918
Accidental Death .....	18	9	18	17	14	22	20	15	16
Natural Causes .....	19	7	6	24	8	7	6	3	8
Suicide .....	5	11	4	4	8	9	4	4	2
	42	27	28	45	30	38	30	22	26

Death-rates per 1,000 of the Population in the various Wards of the Borough.

WARDS. Population.	Central. 5307	West- Central. 3226	North- East 7373	North- West 6176	South- East 5600	South- West 5174	Death- Rate per month.
1918							
January .....	20.35	7.44	16.27	11.64	6.43	18.55	13.88
February .....	11.30	11.16	22.78	17.49	8.57	6.96	13.88
March .....	15.82	7.44	17.94	9.71	12.86	13.91	13.51
April .....	11.30	11.16	11.39	11.64	17.14	6.96	11.69
May .....	9.04	3.72	16.27	9.71	15.00	11.59	11.69
June .....	22.61	11.16	3.39	7.77	27.86	2.32	12.05
July .....	11.30	7.44	27.67	19.43	17.14	32.47	24.53
August .....	9.04	14.88	9.76	3.88	6.43	20.87	10.23
September ....	13.57	22.32	11.39	5.83	10.71	11.63	11.69
October .....	18.09	18.60	11.39	13.60	8.57	9.27	12.77
November.....	49.74	55.79	52.08	44.69	60.00	57.98	52.96
December ....	33.92	33.48	40.69	19.43	38.57	51.02	33.15
Transfers ...	33.92	40.91	42.31	19.43	25.71	30.15	31.77
Rate for year..	21.67	20.46	23.60	16.19	21.25	22.81	21.08

Death-Rates in the Various Wards for the past 26 Years.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Borough.
1893	18.2	15.4	16.0	21.0	19.9	22.2	19.0
1894	14.66	15.22	15.54	13.04	16.96	14.63	15.0
1895	17.0	17.39	20.6	12.33	17.65	19.82	17.7
1896	12.8	17.8	16.4	17.5	19.8	19.2	17.1
1897	17.52	15.22	18.16	16.14	18.37	18.64	17.3
1898	16.09	18.58	17.82	14.99	15.51	18.0	16.8
1899	18.45	15.80	15.38	12.50	20.85	18.05	17.0
1900	20.78	17.28	21.40	21.09	20.03	20.50	20.4
1901	17.92	17.36	14.21	17.05	18.46	13.83	20.8
1902	13.13	15.78	14.13	13.60	14.11	17.34	14.6
1903	14.13	13.95	11.67	12.97	11.85	13.17	12.8
1904	14.12	15.21	14.52	20.50	14.54	14.54	15.2
1905	13.30	14.15	13.24	16.67	15.41	12.84	14.0
1906	11.40	12.83	14.66	11.68	12.52	14.64	13.11
1907	12.79	12.55	12.27	15.69	10.86	12.07	12.58
1908	11.77	13.28	13.46	15.31	11.32	13.39	13.01
1909	12.58	18.16	11.22	17.74	15.26	15.47	14.44
1910	15.02	16.18	11.67	14.37	11.51	13.24	13.33
1911	17.93	18.23	16.32	13.23	12.47	18.13	15.87
1912	14.09	15.92	12.83	12.99	13.99	14.69	13.86
1913	12.33	15.12	14.22	14.76	14.79	14.14	14.18
1914	13.73	10.31	16.15	13.19	15.12	16.37	14.49
1915	17.56	15.49	15.17	14.54	13.01	15.72	15.21
1916	17.34	13.99	15.85	15.48	12.01	12.66	14.68
1917	15.35	9.80	17.68	12.88	13.01	14.26	14.29
1918	21.67	20.46	23.60	16.19	21.25	22.81	21.08
Average	15.45	15.44	15.54	15.29	15.40	16.17	15.69



# CAUSES OF DEATH IN DARWEN, M.B., 1918.

Causes of Death (Civilians only).		Males.	Females.
All Causes.		309	283
1.	Enteric Fever .....	...	...
2.	Small Pox .....	...	...
3.	Measles .....	6	2
4.	Scarlet Fever .....	1	1
5.	Whooping Cough .....	...	3
6.	Diphtheria and Croup .....	...	1
7.	Influenza .....	71	102
8.	Erysipelas .....	...	...
9.	Pulmonary Tuberculosis .....	12	20
10.	Tubercular Meningitis .....	1	3
11.	Other Tuberculous Diseases .....	4	3
12.	Cancer, Malignant Disease .....	29	27
13.	Rheumatic Fever .....	2	1
14.	Meningitis .....	2	1
15.	Organic Heart Disease .....	23	41
16.	Bronchitis .....	25	29
17.	Pneumonia (all forms) .....	23	30
18.	Other Respiratory Diseases .....	6	6
19.	Diarrhoea, &c. (under 2 years).....	3	...
20.	Appendicitis and Typhlitis.....	2	...
21.	Cirrhosis of Liver .....	...	...
21A.	Alcoholism .....	1	...
22.	Nephritis and Bright's Disease .....	13	8
23.	Puerperal Fever .....	...	3
24.	Parturition (apart from Puerperal Fever) .....	...	3
25.	Congenital Debility, &c. ....	2	2
26.	Violence (apart from Suicide) .....	10	6
27.	Suicide .....	2	...
28.	Other Defined Diseases .....	68	88
29.	Causes Ill-Defined or Unknown.....	3	3
Special Causes (included above) { Cerebro-Spinal Fever ....		...	...
{ Poliomyelitis .....		...	...
Deaths of Infants under 1 year of age .....		14	12
Total Births .....		184	169
Legitimate .....		175	162
Illegitimate .....		9	7
Population { For Death Rate.....		32,814	
{ For Birth Rate .....		36,814	



**DEATHS.** The death rate for the Borough was 21.08 per 1,000 of the population. For North-East Ward it was 23.60 per 1,000, this being the highest in the wards. That in which the lowest occurred was North-West, viz., 16.19 per 1,000.

There must be a good reason for this great difference in the two wards.

North-West Ward lies on the Moorland side of Duckworth Street, embracing the Lee District; the property is a good-class artizan, and from this character one must judge the inhabitants are cleanly and thriving. The poorer class is not in any large number.

Another point which should not be overlooked is, the prevailing winds are north-west. They pass over here first; thus the district is kept clear of smoke. North-East Ward, of necessity, receives its winds second-hand as it were. What is probably of greater importance, a fair proportion of the property is of a lower-class. "Comparisons are odious," so I will not specify any part: only to point the moral that, with a higher grade of houses, greater cleanliness, with increasing pride in one's domicile, there must be more attention to personal habits, etc., and, consequently, a pro rata decrease in the death rate, thus opening up an avenue along which our energies may well be directed, as well as those of our teachers and leaders in sanitary improvements.

Influenza was responsible for 173 deaths out of a total of 692 or 25%.

The following is a copy of a Report which I made at the time :—

HEALTH OFFICE,  
DARWEN.

16th January, 1919.

TO THE PRESIDENT OF THE LOCAL GOVERNMENT BOARD.

SIR,

At Midsunmer last we had a short and small epidemic of Influenza in this town, resulting in 17 deaths during the month of July. The attack, however, quickly subsided until late in October, when there were signs of a recrudescence, and 3 deaths took place. The following month, November, Influenza quickly increased in numbers and severity—the whole town raged with it—and there were 84 deaths. This epidemic extended into December; then, owing to the following precautions, it quickly subsided, as the figures will show. The deaths in December were 57, 3 of which were outward transfers. December, week ending the 7th, 45 deaths; week ending the 14th, 9 deaths; week ending the 21st, 2 deaths; week ending the 28th, 1 death.

Funerals followed each other with such frequency as almost constituted a procession. The undertakers were working night and day to supply coffins ; they were short of men and horses, yet, in spite of the heavy strain put upon them, bodies were not kept waiting indecently long for interment.

I felt the need of strong, drastic measures if the force of the epidemic had to be stemmed ; and, with the sanction and help of the Mayor, who is Chairman, and Councillor G. P. Holden, Vice-Chairman of the Health Committee, I wrote to the medical men in the town, asking for their co-operation to the extent of advising me daily of the number of fresh cases of Influenza, and, if possible, the names and addresses. The response to this was only feeble, probably owing to the pressure of work.

I advised my Committee to close the Elementary Day Schools, the Secondary School, and the Evening Classes. I also wrote to all the religious bodies, requesting the suspension of Sunday Schools, and this was done.

I wrote to all the mills and workshops, and the heads of all places employing people, giving them instructions how to combat the epidemic, and also sent them placards with printed instructions on the same lines, in particular to cotton manufacturers, advising them in the event of a weaver being " off sick," before another weaver was put on those looms, to supply new shuttles, and to disinfect, wash, and place in the sun the old ones. This advice was acted upon.

I took the Health Visitor and the School Nurse off their ordinary work and put them on Influenza cases entirely, to give instructions how to prevent its spread, and, as far as possible, to act as nurses to the patients.

The Free Library was closed as regards the lending-out of books was concerned, and before it was re-opened all the books brought in were fumigated in a strong room with Formalin. Personally, I do not see much danger from contact with the books ; but, as a safeguard, and to meet the wishes of the Vice-Chairman, Mr. Holden, it was closed.

The proprietors of the Theatre and Cinema Palaces were written to, requesting them to close their places until the epidemic was over ; but they declined, so they were asked to meet the Mayor, Vice-Chairman, Town Clerk and myself. The meeting took place, and the matter was put before them from a Public Health point of view, the severity of the epidemic, the appalling high death rate being pleaded as a sufficient reason for the request. Mr. Holden offered a sum of money, out of his own pocket, against any loss, and this amount was afterwards considerably increased, but refused by the Secretary of the North-Western Branch of the Association of Cinema Proprietors, who was present. All these shows were kept open, and often crowded.



I asked the Agents of the Candidates for the House of Commons to stop their meetings, and this was done ; but, after a week, some disagreement arose, so I called a meeting, asking them to meet the same gentlemen previously mentioned. They met us, but had not sufficient authority to do anything, so we requested them to meet again in the afternoon with their respective chairmen. This meeting took place when Mr. McGurk, the Labour Candidate, was also present ; and, on my stating my case, he immediately promised to stop his meetings, and also his canvassers from going out. This was agreed to all round and strictly adhered to, and, I consider, was an important factor in stopping the epidemic.

The tramcars were placarded, advising people against overcrowding them, and instructions were also given to the conductors to prevent this, and at every stopping place to open both doors. I wanted the doors to be kept open all the time when running, to secure a current of air through, but strong objections were raised against this, so it was not carried out.

The same placards were distributed on all the hoardings throughout the town. I also sent a letter each week to the local papers, dealing with the epidemic and giving general instructions.

The ministers of all the places of worship were called to meet the Mayor, Vice-Chairman, and myself, and the matter discussed. They agreed not to hold any public meetings, concerts, entertainments, tea parties, etc., until the New Year.

The engagement books of the two Co-operative Societies were inspected to ascertain for what purposes the assembly rooms were being engaged, and if for any purpose, entertainment, dance, etc., whereby people congregated in numbers, the responsible person in each case was approached with a view to preventing or postponing it. For the same reason the newspapers, advertising sheets, and placards were watched and the same precautions taken, in many cases with favourable results. Mr. Holden (Vice-Chairman) personally visited places where he had casually heard of a dance, meeting, or tea party was being held, and asked the people to disperse.

Mr. Holden also gave me permission and instructions to fit up some place in the town as a temporary hospital for serious or overcrowded cases of Influenza. I thereupon got permission of the Chairman of the Education Committee to use one of the Elementary Schools, and I selected Sprink Bank School as the most suitable, because of its having a cookery centre. I then approached the Matron (Miss Walker), of the Moss Bridge Auxiliary Military Hospital to help me. She promised to equip, provision, and staff it. This she did in a remarkably efficient and rapid manner, having it completed, ready for twenty patients, in twenty-four hours.

I also took the Matron and a Probationer of the Day Nursery for night duty.



We began at once, and, with much difficulty on account of the scarcity of horses, to take in patients. We had eleven of these. The building lent itself to the purpose well ; the patients were comfortable, the staff excellent, and the results good. We had no deaths, and I feel sure that probably at least three might have lost their lives if they had not been removed.

I have gone into details because the curve of mortality was remarkable. It ran up very quickly, remained high, and then came a sudden and big drop. It could not be for want of susceptible material, for there was a great deal of this still left. It points to the drop as the result of the energetic measures adopted, and I was indebted to the Chairman and Vice-Chairman for their very valuable help.

I regret one thing—that I did not open the school as a hospital earlier. In the present instance the patients were under my care on being admitted.

In my opinion, the greatest factor in the spread of the disease was the crowding together in theatre and cinema palaces ; and, under similar circumstances, these should be closed, first on the recommendation of the Medical Officer of Health, sanctioned by the Health Committee, and confirmed by a Bench of Magistrates, before which the proprietors would have an opportunity of stating their case. It would be fair to them, although I am afraid there might, at times, be a difficulty in persuading a number of magistrates that it was necessary.

I am,

Your obedient Servant,

F. G. HAWORTH,

Medical Officer of Health.



## DISINFECTION.

During the year infected bedding was removed from 133 houses for disinfection and 103 rooms were fumigated.

### LIST OF BEDDING DISINFECTED DURING 1917.

Beds.	Mattresses.	Bolsters.	Pillows.	Quilts.	Blankets.	Sheets.	Suits of Clothes.	Carpets.	Rugs.	Curtains.	Cushions.	Shawls.	Sundries.
140	10	83	143	76	113	47	1	3	0	0	4	5	153

## INFANTILE MORTALITY.

Infantile Mortality was 74 per 1,000 births, the lowest in the history of Darwen.

In July of the year in which I am writing this report, viz., 1919, I attended a conference on Mother and Child Welfare, in Kingsway Hall, London. It lasted three days, and was full of interest and information.

It was stated that 50% of the deaths of infants are preventable. How far this is true I do not know, nor yet on what figures this is based. The average for the last thirty years is 142 per 1,000. Certainly this rate should be, and, in my opinion, will be reduced by at least one-half. The figure 74 cannot be reduced very much more, because it only represents only 26 deaths. There is not much lee way to work upon ; yet, when we consider that 19 children were still-born, it gives us more to go upon. A good proportion of these should be saved, and added to the lives of a healthy population.

We have only, as it were, the scattered remnants amongst which to exercise our salvage operations, and, by saving one here and one there, to increase the actual number of viable and healthy infants, raise the birth rate, and, coincidentally, lower the infant death rate.

Another direction in which these beneficent operations might and should be extended is in the direction of illegitimate births. For some reason not quite so patent, the death rate of this class is double that of the children of married women ; and, although the number is not very large during the year, every little adds.

In the event of Moss Bridge Hospital being taken over by the Council, as recommended by me, these unmarried pregnant women should be admitted two or three months before the expected confinement, so as to keep them under observation, correct any mal-presentation, and, if any latent disease, put them under treatment ; and keep them in hospital to breast-feed their little ones.



Among the main causes of foetal comes Syphilis, with 30%, closely followed by Toxamia of Pregnancy, with 20%. Both these conditions can have the results much modified by treatment, if this is undertaken early enough. To effect this, the pregnant women must be directly under observation, and amenable to treatment. This, again, is where Moss Bridge Hospital would be invaluable. Also, early information should be obtained of previous pregnancies and labours; because there is no doubt when a woman has repeated miscarriages, this is largely due to Toxæmia of one kind or another. First, there are the still-births, of which there were 19 during the year. In favour of treatment in hospital of these cases is the fact that, though their salvage will not lower the death rate, it would raise the birth rate. They do not reach the point of viable children; they are lost to the State, with all the consequences of wasted production.

Another point, during the past 28 years 559 infants have died of premature birth, or, practically, 20 per annum. Many of these are from the same cause, and a proportion should be saved, resulting in a marked improvement in the Infantile Death Rate.

For the 18 years, from 1889 to 1906 inclusive, the average Infantile Death Rate was 160 per 1,000 births; whereas, the 12 years, from 1907 to 1918 inclusive, showed a rate of 117 per 1,000 births, or a reduction of 43 per 1,000 births, in spite of the high rate in 1911, when it was 153 per 1,000. This was an exceptionally bad year all over the country, from infectious Diarrhoea, owing to the long, dry Summer.

This gradual improvement in the death rate of infants is not a coincidence, nor can it be due to improved sanitary conditions, because these are constantly going on, and the effects would have been evident before now. They date from a particular period, viz., the institution of a Health Visitor, who, as early as possible after the notification of a birth visits the house, secures information about the new-comer, its weight and general health, the method of feeding, the food, paying particular attention to this—advising breast-feeding as a baby's natural food, and superior to all artificial ones—makes enquiries as to the child's clothing, and gives instructions in the making of little garments. This is very splendid work, the results of which are seen in a lower death rate.

This is not all. Every life saved is a gain to the town, and to the State. Until we secure more attention to home life we shall fall short of our ambitious ends. If a palace can be kept beautiful and clean, so can a cottage.

What we want, generally speaking, are more simple dwellings, labour-saving devices, and the utmost cleanliness.

Let me draw a picture too frequently come across in all manufacturing towns.



The front room or, where there is a lobby, the parlour, shows evidence of being seldom used, probably only on the Sunday. During the week it does duty as a receptacle for the Sunday clothes, and as a garage for one or more bicycles ; the furniture—once so nice, if somewhat rococo at the commencement of its career—now shows signs of its decadence, not from use, but from want of care, dusting, etc., etc.

Where there is no lobby, its principal use appears to be as a passage through from front door to the living room ; consequently, it is not easily kept clean ; signs are numerous that this is not vigorously attempted.

The kitchen, often overcrowded with goods and humanity, from this constant use becomes disordered and dirty ; the ertswile curtains on windows and doorways are torn and unclean ; paper on the wall has degenerated and evidently been torn off by some playful and mischievous child ; the ceiling is dark and dusty, and the whole affair shocks the onlooker.

This is not the way to make home comfortable nor attractive to the younger members of the family.

In the first place, it is the duty of us, as parents, to make our home-life of such a character as to put it in competition with places of amusement, and the house itself more comfortable than such places. The home should be the most attractive place, so that there is no temptation to leave it. Toys should be provided for the younger ones, and hobbies, according to their bent, for the older ones ; and, if we take an intelligent interest in the tastes of our children, the streets of the town would not attract the crowds they do. Before this can obtain, our homes must be cleaner than they are. Why not, then, let the children have the use of one room, either parlour or kitchen, so that they will feel something is being done for their pleasures, and also some of the restrictions, either from want of space or our company, are removed for their benefit.

A clean house will be a sanitary one, for which labour, light, and fresh air are necessary.

putting up dwellings to provide homes for the people, and prevent overcrowding is the duty of the Town Council. These can be made good, healthy, sanitary houses ; but it is not quite so easy, although quite as much a duty, to make some of the present property into artizans' dwellings, fit to live in. When this is done, it rests with the tenants to keep them so.

Another matter I have mentioned in previous reports is the back-yard. A more depressing view than the majority of these I do not know, and entirely because, as a rule, nothing is attempted to improve them. They want brightening up. A coat

or two of whitewash would do this. If some flower boxes were put in with flowering plants and creepers, they would not only make the back-yard very attractive and beautiful, but find some interesting work for the children.

First, make the home beautiful, and, second, keep the occupants at home with interesting and useful work.

I have in mind results more far-reaching than these, viz., healthier homes in which to bring up our babies. If this can be accomplished we shall do more to save these little ones than all the Child Welfare Centres and Day Nurseries, because we get at the centre of things, at the starting point, of all the causes of ill-health. Not only is it the duty of the Council, but of every one of the inhabitants of Darwen.

To sum up—

(1). Breast feeding, because it is the natural food of an infant, always the right temperature, viz., that of the body. The baby gets it direct, and it does not contain either germs or dirt.

(2). Healthy surroundings, which means healthy children.

This is not an indictment against the whole of Darwen. Many people keep their homes nice ; at the same time we have too many of the class above described.

The following is Mrs. Shawcross's (Health Visitor) Report :—

HEALTH VISITOR'S OFFICE,  
43 BOLTON ROAD,  
DARWEN.

March, 1919,

DR. F. G. HAWORTH,  
MEDICAL OFFICER OF HEALTH.  
SIR,

SUMMARY OF ANNUAL REPORT FOR 1918.

First Visits .....	320
Second Visits .....	1477
Total .....	1797

METHODS OF FEEDING.

	1918	1917
Breast .....	210	252
Bottle .....	97	99
Breast and Bottle .....	39	25
	346	376
	1918	1917
Bottles without Tubes .....	119	96
Glass Tubes .....	7	10
Rubber Tubes .....	10	15
	136	121



FOODS.	1918	1917
Milk and Water.....	47	79
Milk and Barley Water .....	19	14
Undiluted Milk .....	27	8
Nestlé's .....	8	5
Prepared Foods .....	17	15
Skimmed Milk .....	...	...
Citrated Milk .....	2	1
Glaxo .....	14	...
	<hr/> 144	<hr/> 122
Babies specially examined by Medical Officer of Health...	163	
Babies regularly examined by Family Medical Men.....	91	
	1918	1917
Number of Names on Mother and Child Welfare Register.....	306	292

I am, Sir,

Your obedient Servant,

H. H. SHAWCROSS,

Health Visitor.



# DEATHS UNDER ONE YEAR OF AGE.

Year	Premature Birth	Convulsions	Bronchitis & Pneumonia	Diarrhoeal Diseases	Whooping Cough	Measles	Inanition	Congenital Defects	Other Causes	Total	Rate per 1,000 Births
1890	...	...	...	...	...	...	...	...	...	184	171
1891	20	39	33	8	...	10	12	...	46	168	151
1892	15	36	37	5	11	...	13	...	60	177	167
1893	24	22	49	16	2	9	12	...	50	184	193
1894	21	17	30	6	10	...	8	...	38	130	125
1895	16	17	33	41	3	13	27	6	36	179	158
1896	25	14	44	35	15	3	18	6	30	187	181
1897	27	11	39	35	4	13	22	8	36	182	163
1898	33	6	33	58	...	11	12	9	48	199	175
1899	22	18	41	43	7	1	9	12	48	200	188
1900	36	16	38	27	4	9	18	5	44	188	191
1901	20	8	35	24	6	3	15	7	30	145	169
1902	23	6	35	16	6	1	7	7	35	135	151
1903	21	2	25	16	7	2	17	4	5	117	124
1904	15	2	21	29	13	8	13	5	25	123	150
1905	31	5	27	11	...	1	17	3	24	118	144
1906	18	5	27	19	...	4	9	3	30	111	136
1907	18	9	34	11	4	...	7	4	17	104	118
1908	27	3	12	26	1	...	10	4	24	107	120
1909	21	1	34	10	8	7	6	5	12	104	127
1910	19	11	17	12	3	...	5	3	25	95	122
1911	22	2	14	23	...	9	18	1	27	116	153
1912	13	4	20	6	10	3	9	4	19	88	127
1913	17	1	20	12	1	2	18	6	17	94	127
1914	16	6	21	10	2	...	14	5	17	91	119
1915	14	3	18	7	6	4	5	1	17	75	112
1916	13	2	9	2	2	1	4	3	15	51	91
1917	9	1	14	5	1	...	4	...	16	40	89
1918	3	...	4	2	...	3	1	1	12	26	74

Table showing Infantile Mortality in the Various Wards.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Boro.?
1911	165	159	174	101	123	188	153
1912	82	155	110	102	165	128	127
1913	105	162	135	145	157	90	127
1914	98	128	122	123	170	99	119
1915	127	151	128	94	57	112	112
1916	109	25	140	107	59	55	91
1917	164	77	76	79	59	104	89
Average for 7 yrs	121	122	126	107	113	111	117
1918	38	57	95	63	133	34	74



## NOTIFICATION OF BIRTHS ACTS.

Table showing the number of Births Notified during 1918.

	Male.	Female.	Total.	Stillborn.
JANUARY .....	17	10	27	3
FEBRUARY .....	7	11	18	2
MARCH .....	17	12	29	2
APRIL .....	13	14	27	2
MAY .....	14	15	29	2
JUNE .....	19	16	35	1
JULY .....	10	17	27	0
AUGUST .....	13	14	27	2
SEPTEMBER .....	21	13	34	3
OCTOBER .....	15	19	34	0
NOVEMBER .....	17	12	29	1
DECEMBER .....	17	15	32	1
	180	168	348	19

Births Notified by Midwives .....	307
"    "    Medical Men .....	19
"    "    Parents .....	6
"    "    Midwives and Medical Men .....	11
"    "    Parents and Medical Men .....	2
"    "    Others .....	3
Total .....	348

All Births were notified with the exception of 11, or 3.1 per cent. of the total.

Births visited after receipt of Notifications ..... 320

Births re-visited       "      "      "      ..... 1477

Table showing Births Notified, Visits, etc.

Year.	Births Notified.				Births not Notified.		Births Visited.		Births Revis'd
	Males.	Femal's	Total.	Still-born.	No.	Prose-cutions.	No.	% of Total	
1911	395	388	783	43	6	0	483	61.7	627
1912	373	336	709	45	10	0	465	65.6	587
1913	407	366	773	46	12	0	351	45.4	560
1914	390	404	794	41	9	0	428	54.2	537
1915	343	338	681	33	12	0	432	63.4	576
1916	272	292	564	27	9	0	421	78.2	596
1917	224	204	428	20	8	0	397	92.8	1370
1918	180	168	348	19	11	0	320	91.9	1477

# ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1918 FOR THE BOROUGH OF DARWEN.

On the Administration of the Factory and Workshop Act, 1901, in connection with :—

## FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

### I.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries) .....	85	10	...
Workshops (including Workshop Laundries).....	374	5	...
Workplaces (others than Outworkers' Premises included in Part 3 of this Report) .....	11	...	...
Total .....	470	15	...

### II.—DEFECTS FOUND.

Particulars.	No. of Defects		Prosecu- tions.
	Found.	Remedied.	
Nuisances under Public Health Acts :—			
Want of Cleanliness .....	3	3	...
Want of Ventilation .....	...	...	...
Overcrowding .....	...	...	...
Want of Drainage to Floors .....	2	2	...
Other Nuisances .....	6	5	...
Sanitary Accommodation :—			
Insufficient .....	3	1	...
Unsuitable or Defective .....	...	...	...
Not Separate for Sexes .....	...	...	...
<hr/>			
Total .....	14	11	...



### III.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS. SECTION 107									OUTWORK IN UN- WHOLESOME PREM- ISES, SECTION 108			OUTWORK IN IN- FECTED PREMISES SECTIONS 109, 110		
	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists	Prose- cutions		Instances	Notices served	Prosecutions	Instances	Orders made (S, 110)	Prosecutions (Sections 109, 110)
	Sending twice in the year			Sending once in the year				Failing to keep or permit inspection of lists	Failing to send lists						
	Out- work'rs		Lists	Out- work'rs											
	Lists	Contractors		Contractors	Workmen										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Wearing Apparel-- (1) making, &c.....	6	...	6	...	...	...	..	.....	.....	.....	.....	.....	.....	.....	.....

### IV.—REGISTERED WORKSHOPS.

Textile Factories .....	56
Non-Textile Factories .....	64
Factory Workshops .....	132
Workshops .....	227
Workplaces .....	41
Total .....	520

### V.—OTHER MATTERS.

Number.

Matters Notified to H.M. Inspector of Factories :—

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) .....	...
Notified by H.M. Inspector .....	2
Reports (of action taken) sent to H.M. Inspector .....	3
Other .....	0
Underground Bakehouses (s. 101) in use at the end of the year .....	3

# METEOROLOGY.

---

The Meteorological Observatory is at Bold Venture Park, in Lat.  $53^{\circ} 41' 25''$  N., and Lon.  $2^{\circ} 28' 32''$  W., and is at an altitude of 728 feet above mean sea level;

Observations are taken twice daily, at 9 a.m. and 9 p.m.

This station is connected with the Meteorological Office, and is called a Normal Climatological Station. A report, giving all details of readings, is sent each month to the Meteorological Office, London.

The total rainfall for the year is 1650.7 millimetres, or 64.99 inches being recorded on 245 days; the average for the last twelve years being 55.06 inches. The greatest monthly fall was in September, 377.9 millimetres; and the lowest in April, 35.6 millimetres. The greatest daily fall was 44.6 millimetres, on September 8th.

The total sunshine registered on 258 days during the year was 1195.7 hours, being above the average for the last twelve years, which is 1143.9 hours. May registered the highest monthly total, 184.5 hours; and December the lowest, 21.0 hours. The highest daily reading was 13.7 hours, on June 1st.

The mean minimum temperature in shade was  $53.3^{\circ}$ , being above the average for the last twelve years, which was  $52.4$ . The highest monthly mean was in August,  $65.8^{\circ}$ ; and the highest reading for the year was  $79.2^{\circ}$ , on May 22nd.

The mean maximum temperature in shade was  $39.6^{\circ}$ , being below the average for the last twelve years, which was  $40.5^{\circ}$ . The lowest monthly mean was in January,  $31.9^{\circ}$ , and the lowest reading for the year  $12.5^{\circ}$ , on January 14th.

The mean minimum temperature on grass was  $35.9^{\circ}$ , being below the average for the last twelve years, which was  $37.2^{\circ}$ . The lowest monthly mean was  $27.1^{\circ}$ , in January; and the lowest reading for the year was  $4.5$ , on January 9th.

The maximum wind velocity was on June 22nd, when a westerly wind was blowing at the rate of 45 miles per hour.

No observations of calm were recorded, 2 observations of fog, 25 observations of snow, and 15 observations of hail, 107 observations of ground frost, 14 observations of thunder, 1 observation of lightning, thunderstorm on 16 days, 130 observations of dew, gale on 1 day, 3 observations of rainbows, 34 observations of hoar frost, 17 observations of mist.



# MEAN METEOROLOGICAL READINGS FOR 1917 AND 1918.

MEAN METEOROLOGICAL READINGS.																																							
MONTH.		Barometer Corrected.		Thermometers.																Hu- midity.		Sunshine. (hours).		Rain (m.m.)		Wind Velocity.		Wind Direction, 1918.											
				Maxi- mum.		Mini- mum.		Mean.		Earth.								Water.																					
										1 Foot.				4 Feet.														10 feet.											
1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	N	NE	E.	S.E.	S.	S.W.	W.	N.W.	C'm									
January ...	29.906	29.920	35.0	41.2	30.5	31.9	32.8	36.5	36.2	36.0	40.4	40.1	44.9	44.9	38.7	39.8	93	90	17.0	36.0	97.4	104.6	9	8	4	1	1	7	22	5	16	6	0						
February .	30.177	30.091	36.8	45.0	27.4	37.4	32.1	41.2	32.7	39.5	37.7	41.7	43.1	46.0	37.8	42.5	92	92	40.3	25.8	40.1	173.9	7	8	2	1	0	7	21	12	12	1	0						
March .....	29.862	30.069	40.8	45.9	29.8	34.0	36.2	39.9	36.1	38.9	38.1	41.2	41.7	45.3	35.8	41.9	93	88	83.6	98.6	85.4	57.2	8	9	3	7	18	6	8	6	12	2	0						
April .....	29.929	30.011	45.3	49.2	32.6	35.7	38.5	42.4	39.4	43.3	39.6	42.5	41.5	45.5	41.4	44.2	90	89	100.3	139.8	67.6	35.6	5	8	3	23	12	6	4	2	8	2	0						
May .....	30.026	30.064	65.4	62.1	44.5	44.6	54.9	53.3	50.7	53.5	44.9	47.0	42.8	46.4	53.9	50.1	74	79	178.2	184.6	50.6	70.3	5	7	2	5	4	6	15	2	16	13	0						
June .....	30.038	30.090	65.2	61.6	48.3	45.7	56.7	53.6	57.7	57.6	52.1	52.5	46.2	47.7	55.0	52.0	76	82	211.8	183.7	70.7	68.8	6	12	1	1	1	4	7	4	27	16	0						
July .....	30.083	29.909	68.8	64.9	49.6	49.4	59.2	57.1	59.3	69.5	64.4	64.4	49.1	49.3	56.1	64.1	69	84	223.4	168.0	68.7	106.1	7	10	0	2	1	6	18	9	19	7	0						
August ....	29.693	29.982	63.4	65.8	51.7	51.7	57.5	58.7	59.1	59.8	55.7	56.0	51.1	51.4	54.8	54.5	88	88	95.0	136.5	228.8	149.8	9	13	0	2	1	3	10	6	32	8	0						
September	30.02	29.678	61.5	55.2	50.4	45.3	55.9	50.2	56.9	53.5	56.0	54.2	52.2	52.7	52.5	60.4	89	90	103.1	92.5	72.2	377.9	8	14	1	0	3	3	13	9	29	2	0						
October ...	29.703	29.971	49.3	51.5	37.3	41.2	43.3	46.3	45.9	45.2	50.7	50.7	62.6	51.8	46.3	46.3	90	90	86.2	73.6	263.2	137.1	10	10	2	7	1	2	23	7	16	4	0						
November.	30.058	30.042	48.0	45.0	40.2	35.2	44.1	40.1	42.9	42.7	46.4	47.4	46.1	49.8	45.4	43.4	92	91	24.7	35.7	167.8	92.1	10	11	0	0	0	9	29	7	12	3	0						
December	30.249	29.773	38.9	51.8	31.1	37.2	35.0	44.5	36.8	42.4	43.6	45.1	47.2	47.8	39.6	44.1	89	94	27.6	21.0	85.9	277.3	8	11	2	0	0	0	32	5	20	3	0						
Totals .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1191.2	1195.7	1298.4	1650.7	...	...	20	49	42	59	202	74	218	66	0						
Mean ...	29.79	29.966	51.5	53.3	30.6	40.8	45.4	46.9	46.1	47.6	46.5	47.7	46.5	48.1	46.4	46.9	86	88	99.3	99.6	108.2	137.5	8	10	...	...	...	...	...	...	...	...	...						





TABLE (C).

COUNTY OF LANCASTER.

SUMMARY OF

Medical Officer's Report for 1918.

URBAN DISTRICT OF DARWEN.

Medical Officer of Health—FREDERIC GEORGE HAWORTH.

Salary as M.O.H.—£250.

Inspectors of Nuisances—William E. Marsden and C. R. Walsh.

Salaries as Inspectors—£160 and £150.

In the Medical Officer of Health or Inspector of Nuisances away on Military Service ?  
—No.

What is the character of the Hospital Accommodation ?—For Small-pox : Farm House, 2 Beds. For other Infectious Diseases : For Scarlet Fever and Typhoid Fever, 1 Block, 20 Beds, good ; 1 Block, 8 Beds, very good.

Is it Joint or otherwise ?—Our own.

No. of Beds available—For Small-pox, 2. For other Infectious Diseases, 28.

Deaths in Hospital of patients removed from your District. From what causes ?—Scarlet Fever, 2.

How is Disinfection carried out ?—No of Houses disinfected ?—103. Method ?—Sulphur and Formalin. Are Houses disinfected after Phthisis ?—Yes. Measles ?—Occasionally. Apparatus used for Clothing, Bedding, &c. (steam or otherwise) ?—Washington Lyons Superheated Steam Disinfector. No of Articles disinfected ?—778. Where is Apparatus situated ?—Bull Hill Hospital. If Apparatus at a Hospital is available, is it used for the disinfection of Clothing, Bedding, &c., of Patients not removed to the Hospital ?—Yes.

Are any Diseases not specifically mentioned in the Infectious Diseases Notification Act notifiable (for instance, Whooping Cough, Diarrhœa, Chicken Pox, &c.) ?  
—No.

Diseases specially prevalent ?—Measles and Influenza. Period ?—January, February, March, July, November, and December. No of times School Closure adopted ?—Three. For what disease ?—Influenza.

No. of Special Reports made under Art. XIX. (15 and 16) Sanitary Officers' Order, 1910 ?—One.

Bacteriological Examinations. Specimens examined: Blood, 4; Swabs, 9; Sputum, 118; Milk, 2; others, 2.

Diphtheria Anti-toxin Order, 1910. Is a supply of Anti-toxin kept within the district?—Yes. Where?—Health Office. Amount used during 1918?—26,000 units.

“THE HOUSING OF THE WORKING CLASSES ACTS, 1890 TO 1909.”

Has your Authority determined the procedure to be adopted for the inspection of your District as required by Article I. of the Regulations of 2nd September, 1910?—Yes.

Has your Authority prepared, as required by Article I. (3), a list of dwelling-houses, the “early inspection of which is, in the opinion of the M.O.H., desirable?”—Yes.

Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Articles (II.) and III.). If so, what officer?—Inspectors of Nuisances.

Have the necessary books, forms, etc., for keeping the required records been obtained and maintained?—Yes.

Action taken in 1918 :—

Total No. of Dwelling-Houses inspected?—226.

No. of Dwelling-Houses specially inspected under Sec. 17 of the Act of 1909?—None.

Have the particulars of these inspections, as specified in Article II. (1) to (8), and Article III. (1) to (8), of the Housing (Inspection of District) Regulations, 1910, been fully recorded?—Yes.

No. of Dwelling-Houses considered unfit for human habitation?—None.

No. of Representations to Authority with a view to making Closing Orders?—None.

No. of Closing Orders made?—None.

No. of Dwelling-Houses in which defects were remedied without making Closing Orders?—None.



No. of Dwelling-Houses put into a fit state of habitation after making Closing Orders ?—None.

No. of Dwelling-Houses demolished ?—None.

General character of defects found to exist ?—None.

Is there a deficiency of housing accommodation ? If so, where, and to what extent ?  
—Yes. In all parts.

What steps are being taken to meet the deficiency ?—Council considering a scheme

Number of New Houses built during 1918 ? By and at the cost of the District Council ?—None. By private enterprise ?—None.

Source of the Water Supply ?—Upland Surface.

What is the condition ?—Good.

Possibilities of contamination ?—Not in vicinity of dwelling-houses.

Any insufficiency, and where ?—No.

Nature of extensions (if any) during the year ?—None.

Is Scavenging and Removal of House Refuse carried out satisfactorily for whole of district ?—Yes.

How performed (state whether by Sanitary Authority, Contract, or Occupiers of Houses) ?—Sanitary Authority.

If Privy Middens exist, are they emptied by day or night ?—None.

How is the Refuse disposed of ?—Burnt in Destructor.

Has a Destructor been provided ?—Yes, Meldrum's.

Where ?—Shorey Bank, near Electricity Works.

#### SEWAGE DISPOSAL WORKS.

Method of Treatment ?—Bacteriological.

What is the character of the Drainage System ? Any developments during year ?—  
Combined System.

Areas, or Townships, without proper drainage system ?—None.

Action taken, Drain Testing, Flushing, &c.—Water, Smoke, Periodic Flushing.

Action taken with regard to the Pollution of Streams ?—No legal action.

Canal Boats. Number inspected ?—None.

What is the condition of the Bakehouses ?—Fairly good. No. ?—49.

What is the condition of the Slaughter-Houses ?—Good. No. ?—2. No. Registered ?—2. No. Licensed ?—2.

Has a Public Abattoir been provided ?—Yes.

Number of Lodging-Houses ?—One only—Municipal.

What is the Sanitary condition of the Schools ?—Good.

#### DAIRIES, COWSHEDS, AND MILKSHOPS.

Are they periodically inspected ?—Yes.

What is their condition ?—Fairly good.

Have Regulations been made under the Order of the L.G.B. ?—Yes.

Are they enforced ?—Yes.

Amount of air space in cubic feet required for each cow ? (a) Where cows are habitually grazed ?—600 cubic feet. (b) Where cows are not habitually grazed ?—600 cubic feet.

No. of Cowkeepers ?—100. No. on Register ?—100.

No. of Inspections during year ?—277.

No. of Dairymen or Milk Purveyors ?—107. No. on Register ?—107.

Any arrangements for veterinary inspection of dairy cows ?—Veterinary Surgeon called in if occasion requires.

Action taken (if any) as to tuberculous milk ?—None.

#### INSPECTION OF FOOD.

Amount condemned or surrendered as unfit for human consumption :—

(a) Tuberculous carcasses and parts ?—2 Beasts, and Internal Organs from 18 Beasts and 6 Pigs.

(b) Diseases, unsound, or unwholesome meat (other than above) ?—6 Sheep, 1 Calf, and 1 Pig ; 2 tons 6 cwt. Offal.

(c) Other food stuffs ?—None.

No. of Legal Proceedings, and result ?—None.



DEPARTMENT OF INSPECTOR OF NUISANCES.

No. of Notices served ?—Informal, 515 ; Statutory, 117.

No. of Nuisances abated ?—538.

No. of Legal Proceedings taken, and result ?—4. One fined £1, including costs ; two ordered to pay costs ; one fined £5 and 5 guineas allowed for costs.

CLOSETS AND ASHPITS.

Privy Middens. No. of Middens ?—None.

No. of Closets attached to these Middens ?—None.

No. of Pail Closets ?—1,765.

No. of Ashpits (excluding Middens) ?—13.

No. of Fresh Water Closets ?—6,378.

No. of Portable Receptacles for Refuse ?—10,450.

No. of Waste Water Closets ?—2,478.

No. of Privy Closets converted during 1918 ?—To Fresh W.C.'s, none ; To Waste W.C.'s, none ; To Pails, &c., none.

No. of Pail Closets converted to Fresh W.C.'s, 7 ; Waste W.C.'s, none.

No. of Waste W.C.'s converted to Fresh W.C.'s ?—None.

Does Council contribute towards the cost of conversion ?—Yes.

How much ?—Half cost of conversion of Pails to W.C.'s.

What kind of Closet Accommodation is being provided for New Property ?—Fresh Water Closets.

SMOKE.

No. of Observations ?—137.

No. of Legal Proceedings taken and result ?—None.

What is the time limit for the emission of black smoke per hour ?—One, two, or three boilers, 5 minutes per hour ; four or more boilers, 7 minutes per hour.

Has the Authority adopted :—

“ The Infectious Diseases (Prevention) Act, 1890 ” ?—Yes, except 5-11 inclusive and section 15.

“ The Public Health Acts, Amendment Act, 1890 ” ? Yes, except that relating to music and dancing.

“ The Public Health Acts Amendment Act, 1907 ” ?—Certain sections.

Has a Health Visitor been appointed by the Local Council ? State whether whole or part time ?—Yes, whole time.

Qualifications of Health Visitor ?—Trained Nurse.

Has any, and, if so what, action been taken by the Council respecting Child Welfare Work ?—Two Maternity and Child Welfare Centres established and held weekly. Day Nursery opened during February, 1918. Milk granted to necessitous cases.

Has any scheme been prepared in regard to the Supply of Food and Milk for Expectant and Nursing Mothers, and of Milk for Infants ?—Yes, after careful enquiries by the Health Visitor.

Is there a District Nursing Association in the District ?—Yes, Queen's Nursing Association.

How many District Nurses employed ?—About 6 Nurses.

Does any arrangement exist between the Council and the Association in respect of Child Welfare Work ?—No.

Does the Association voluntarily undertake Child Welfare Work ?—No.

Notable Sanitary Improvements during 1918 ?—None.

Chief Sanitary Requirements of District ?—Completion of Pails to Water Closets.

Signed,

F. G. HAWORTH,

Medical Officer of Health.

15th May, 1919.





REPORT  
OF THE  
**INSPECTORS OF NUISANCES**

FOR THE  
Year ending 31st December, 1918.



PUBLIC HEALTH OFFICE,  
DARWEN,  
MARCH 14th, 1918.

**TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.**

GENTLEMEN,

I beg to submit my Annual Report of the work carried out by me in the Health Department during the year ending December 31st, 1918.

The District to which the Report refers comprises Central, South East and South West Wards.

	Area in Acres.	No. of Houses.	Estimated Population.
CENTRAL WARD .....	110	1671	5307
SOUTH EAST .....	1900	1717	5600
SOUTH WEST .....	1980	1644	5174

**INFECTIOUS DISEASES.**

The number of notifications received during 1918 was 463, as compared with 125 in 1917, or an increase of 338.

The following Table gives a list of cases notified in each of the Wards in 1918-1917.

WARD	Scarlet Fever		Typhoid Fever		Diphtheria		Ery- sipelas		Puerperal Fever		Con- sumption		Measles	
	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917
Central .....	5	13	0	0	2	2	2	2	0	0	15	14	133	23
South East .....	13	9	1	0	2	1	3	0	0	1	7	10	142	31
South West .....	3	0	0	1	0	0	0	3	1	0	7	7	127	13
Totals .....	21	22	1	1	4	3	5	5	1	1	29	31	402	67

SCARLET FEVER. 21 cases were reported, 11 of which were removed to Bull Hill Hospital—2 from Central Ward, 8 from South West and 1 from Central. Ward

TYPHOID FEVER. Only 1 case of Typhoid Fever was notified—Stork Street, South East Ward.

DIPHTHERIA. 4 cases reported, against 3 in previous year.



MEASLES. 402 cases of this disease were notified, and these were spread equally over the 3 wards, as will be seen from the table above. The number of children excluded from attending school where infectious cases existed was 325.

The Schools mostly affected by this disease were :—Highfield School, South East Ward ; Bolton Road, South West Ward ; Culvert, South West Ward ; St. James', Central.

INFLUENZA. During November and December a number of cases of Influenza were notified to the Department. Spring Bank Council School was taken as a temporary hospital, and I removed 10 cases thereto from various parts of the Borough.

As early as possible after receipt of a notification, the premises are visited and all particulars relating to the patient and also as to the sanitary condition of the house are obtained. Verbal and printed instructions are given to prevent spread of the disease.

Notices are sent to the Public Library, Education Offices, and Head Masters of Schools where the patient attends, notifying them of the existence of the disease, and, after recovery or removal to Hospital, all articles of bedding, etc., are conveyed to the disinfecter for stoving, and premises are fumigated.

During 1918 73 rooms were disinfected, and the following is a list of bedding removed for disinfection, consisting of 72 van loads :—

	Beds	Bedding	Bolsters	Pillows	Quilts	Blankets	Sheets	Suits of Clothes	Carpets	Rugs	Cushions	Shawls	Sundries	Total
Central .....	30	2	20	26	16	24	9	1	3	...	...	2	51	184
South East .....	28	0	19	30	23	29	9	0	0	...	...	...	17	155
South West .....	16	...	9	20	7	7	5	0	1	...	...	1	9	75
	74	2	48	76	46	60	23	1	4	...	...	3	77	414

Previous years :—

1917 .....	55	12	38	64	52	58	16	1	0	1	5	2	71	375
1916 .....	76	16	58	83	67	67	21	3	0	1	1	2	55	450
1915 .....	103	33	92	106	70	115	27	1	3	7	6	7	136	706
1914 .....	88	19	73	94	75	125	26	1	3	1	5	12	77	599
1913 .....	45	18	30	49	22	21	9	0	6	8	2	6	15	227

Articles destroyed, at the request of the owners, after infectious diseases were :—

Beds .....	28	Pillows .....	12
Mattresses .....	8	Quilts .....	4
Bolsters .....	16	Blankets .....	2
		Sheets .....	2

## NUISANCES, &c.

During 1918 I received 91 verbal and written complaints of nuisances, as compared with 97 in 1917,

The complaints were chiefly relating to choked drains, W.W. closets, and bad smells. In all cases the premises were visited as early as possible, and the nuisance remedied within a few days,

The following Table gives a list of Inspections, notices served, and result, as required to be furnished to the Medical Officer of Health under Article 20 Sec. 16 of the Sanitary Officers' Order of 1910 :—

Nature of Inspections	Number of Inspections.	Number of Notices Served.		Result of Service of Notice.			
		Legal.	Preliminary.	Nuisances Abated.	Remaining in hand.	Prosecutions. Instituted.	Pending
Dwelling Houses .....	1654						
Houses Town Planning Act	178	94	352	355	44	.....	.....
Factories and Workshops	272	2	10	6	3	.....	.....
Dairies and Cowsheds.....	215	5	19	23	4	.....	.....
Bakehouses .....	169	.....	2	2	.....	.....	.....
Infectious Diseases .....	463	.....	.....	.....	.....	2	.....
Smoke Observations .....	86	.....	.....	.....	.....	1	.....
NUISANCES.							
Defective Drains .....	43	9	35	39	4	.....	.....
„ Slop Gullies ....	29	4	27	23	6	.....	.....
„ Soilpipes, W.C.s etc. ....	21	3	19	19	2	.....	.....
„ Troughs and Downspouts .	113	29	89	100	13	.....	.....
Insanitary Yards.....	6	2	5	6	.....	.....	.....
Dirty Houses, etc.....	31	6	30	29	2	.....	.....
Dirty Closets.....	16	4	15	16	.....	.....	.....
Accumulation of Refuse...	38	5	37	32	6	.....	.....
Nuisance from Animals....	2	2	2	2	.....	.....	.....
Ashtubs without Covers and Broken .....	24	8	23	22	2	.....	.....
Broken Sloppipes .....	17	4	17	14	3	.....	.....
Choked Waste Water Cls.	25	6	24	23	2	.....	.....
Insufficient Closet Accom.	2	2	1	2	.....	.....	.....
Overcrowding .....	3	3	2	3	.....	.....	.....
Dirty Bedding, etc.....	2	2	1	2	.....	.....	.....
Dangerous and Dilapidated Closets .....	3	1	2	3	.....	.....	.....
Manure Pits.....	7	1	6	6	1	.....	.....
Broken Closet Receptacle Doors.....	12	2	12	9	3	.....	.....
Miscellaneous .....	5	1	5	5	0	.....	.....



## DAIRIES AND COWSHEDS.

215 Inspections were made of the Farms situate in South East Ward and South West Ward. The premises were found to be in a fairly clean and sanitary condition. I served a number of notices to abate nuisances, a list of which follows.

At Mount Pleasant Farm a large concrete tank has been provided for the water supply.

At Lower Barn Farm the shippons have been re-modelled, concrete floors constructed, and the ventilation and lighting improved.

### SUMMARY OF NUISANCES DEALT WITH.

Shippons reconstructed .....	2	Downspouts repaired .....	3
Improved Ventilation .....	2	Repairs to Flagging, &c. in Shippons	3
„ Cubic Space .....	2	New Windows fixed .....	1
New Water Supply provided .....	1	Limewash and Cleansed .....	3
New Manure Pit provided .....	1	Water Troughs made Sanitary .....	3
Drains Repaired .....	1		

Dairymen and Cowkeepers on Register .....

69

Purveyors of Milk .....

7

Dairymen registered during 1918 .....

7

Purveyors of Milk .....

1

## FACTORIES AND WORKSHOPS.

The number of Factories and Workshops Inspections were 272, and Bakehouse Inspections 169, and the workshops were generally found to be in a satisfactory condition. Several notices have been served to abate nuisances, and these were abated as early as possible.

The following gives the list of particulars in the form as required by the Local Government Board :—

### FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORKERS' PREMISES.

#### I.—INSPECTION.

	Number of Inspec- tions.	Notices Written.
Factories, including Factory Laundries .....	59	7
Workshops, including Workshop Laundries .....	272	3
Workplaces, Homeworkers' Premises .....	6	...
	<hr/> 337 <hr/>	<hr/> 10 <hr/>



# NUISANCES UNDER PUBLIC HEALTH ACT. II.—DEFECTS FOUND.

	Number of Defects Found. Remedied.	
Want of Cleanliness .....	2	2
„ Ventilation .....	...	...
Overcrowding .....	...	...
Want of Drainage to Floors .....	...	...
Other Nuisances .....	4	3
Sanitary Accommodation Insufficient, Unsuitable, or Defective (not separate for sexes) .....	3	1

## III.—OTHER MATTERS.

Matters notified to H.M. Inspector of Factories .....	2
Failure to fix Abstract of Factory and Workshop Act (Sec. 133)— Action taken in matters under the Public Health Acts, but not under the Factory Act (S. 5) .....	9
Reports of action taken sent to H.M. Inspectors.....	3
Underground Bakehouses (S. 101) .....	3

## IV.—REGISTERED WORKSHOPS.

Workshops on Register (S. 131) .....	130
Workshop Laundries .....	3
„ Bakehouses .....	30
Other Workshops .....	24

## BLACK SMOKE.

During year 1918, 86 Smoke Observations were taken, each of 1 hour's duration, against 90 in 1917.

The average emission of Black Smoke for 1918 was 2 mins. 17 secs. per hour. For 1917 the average was 2 $\frac{3}{4}$  minutes.

The following gives a list of observations during the year :—

MILL.	No. of Obser- vations.	Average of Black Smoke.		Boilers.	Apparatus.
		Min.	Secs.		
Marsh House .....	2	1	22	1	Hand.
Whitehall .....	2	1	30	1	Benniss's.
Greenfield (Old Side) .....	3	1	35	1	Procter's.
„ (New) .....	1	1	45	1	Procter's.
Perseverance .....	2	1	45	1	„
New Bridge .....	3	1	50	1	Whittaker's.
Primrose .....	2	1	52	1	Procter's.
Cotton Hall (Whipps) .....	2	1	52	1	Benniss's.
Darwen Paper .....	1	2	0	8	Hodgkinson's.
Springfield .....	2	2	0	1	Hand.
Two Gates .....	1	2	0	1	Procter's.
Progress .....	2	2	7	1	Whittaker's.

MILL.	No. of Obser- vations.	Average of Black Smoke. Min. Secs.	Boilers.	Apparatus.
Holme Mill .....	3	2 10	1	Procter's.
Ellenshaw .....	3	2 10	1	Hand.
Hampden .....	4	2 15	1	Procter's.
Starkie Street .....	3	2 20	1	Hand.
Hope .....	4	2 22	2	"
Waterfield .....	2	2 22	1	Grimshaw's.
Hanover Street .....	3	2 25	1	Hand, 1 Benniss's.
Vale Brook.....	4	2 25	1	Procter's.
Britannia .....	4	2 30	2	Hand.
South Street .....	2	2 30	1	" 1 Benniss's.
Bowling Green.....	3	2 35	3	Procter's.
No. 1 Spinning .....	3	2 35	2	Whittaker's.
India .....	3	2 45	3	Hand.
Tackfield .....	3	2 45	1	"
Highfield .....	4	3 0	1	"
New Mill.....	3	3 0	2	1 Hand, 1 Benniss's.
South End .....	3	3 5	1	Procter's.
Albert Mill .....	2	3 15	2	Hand.
Darwen Spinning .....	3	3 35	3	"
Premier.....	4	3 45	1	"

#### SALE OF FOOD AND DRUGS ACT, 1875 TO 1907.

As Inspector under the above Acts, I purchased samples of the undermentioned articles and submitted them to the County Analyst for analysis, with the results as under :—

Date.	Article.	Quantity	Result.
1918			
Jan. 4	Damson Jam	... 2lb. ...	Genuine.
April 8	Condensed Milk	... 1 lb. ...	Consisted of Sweetened Machine - skimmed Milk practically devoid of fat.
" 8	"	... " ...	Consisted of Sweetened Full-Cream Condensed Milk, containing 8.5 per cent. of fat.
" 13	Cocoa Butter	... " ...	Genuine.
" 30	Lard Substitute	... ½ lb. ...	"
Aug. 22	Condensed Milk	... 1 Tin	" as labelled.
" 22	"	... " ...	" "
" 22	"	... " ...	"
" 22	"	... " ...	"
Nov.	Strawberry Jam	... 1 lb. ...	"



## HOUSING AND TOWN PLANNING ACT.

The whole of the houses scheduled under the Housing and Town Planning Act were inspected several times during the year, but most of them were found to be empty. Several reports, and also a report of insanitary property, were submitted to the Health Sub-Committee in November and December.

A census of empty property was taken in November, with the following result :—

	Central Ward.	South East Ward.	South West Ward.
Total Number of Houses .....	1671	1711	1642
Empty Houses .....	42	61	84
„ and Shops .....	2	6	4
Lock-up-Shops .....	4	5	4

## INSPECTION OF FOOD.

The premises where food is prepared for consumption are frequently visited, and every precaution taken to see that only food in a good and wholesome condition is exposed for sale.

The fish and fruit stalls at the Market are continually under observation. Periodical visits are made to the Railway Stations to inspect meat from various places.

## MANURE PITS.

All Manure Pits were periodically inspected, and generally found to be in a sanitary condition, there being only small quantities accumulated, owing to the scarcity of manure.

Very frequent inspections were made during the hot weather, and circulars were issued, asking the owners and occupiers of stables to co-operate with the Department in preventing a nuisance from flies. A copy of Bye-laws, etc., in force within the Borough were issued to all owners of horses, etc.

## PUBLIC ELEMENTARY SCHOOLS.

The Public Elementary Schools in the district were frequently visited, and special visits were made immediately after vacations, when the premises were thoroughly cleansed.

In cases of minor sanitary defects being found, notice was at once sent to the Secretary of Education and the matters remedied.

### PROSECUTIONS DURING 1918

Date.	Name.	Offence.	Result—Fines.
Feb. 14	Sumner	Emitting Black Smoke from Motor Wagon ... ..	£1 including costs.
Mar. 7	Fish ...	Exposing person suffering from Measles ... ..	To pay Costs.
Mar. 7	Williams	„ „ „	„
June 13	Redman	Condensed Milk ... ..	£5 and 5/5/- Costs.

Supplementary reports on matters requiring attention have been submitted to the Health Committee every month, along with recommendations for the serving of legal notices, etc., under the Public Health Acts.

I am, Gentlemen,

Your obedient servant,

**WILLIAM E. MARSDEN, M.I.S.E.,**

Cert. Royal San. Inst., &c.





PUBLIC HEALTH OFFICE,

February, 1919.

# Northern District.

## TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

The following is a brief summary of the work carried out by me in the above district during the year ending December 31st, 1918. The district is comprised of North-East, North-West, and West-Central Wards.

During the month of December I made a survey of my district, with the following result :—

	West Central Ward.	North East Ward.	North West Ward.	Total.
Total Number of Houses .....	940	2327	1948	5215
Empty Houses .....	47	90	29	166
Empty Houses and Shops .....	6	10	12	28
Empty Lock-up Shops .....	7	8	1	16
Number of Rooms—				
3 Room .....	...	1	...	1
2 Rooms .....	4	3	2	9
3 „ .....	1	4	1	6
4 „ .....	38	83	24	145
5 „ .....	5	14	4	23
6 „ and over .....	12	3	11	26

Table showing result of previous Inspections —

	Dwelling Houses and Houses and Shops Empty.		
	Nov., 1916.	Sept., 1917.	Dec., 1918.
West Central Ward .....	27	54	53
North-East Ward .....	64	98	100
North-West Ward.....	28	36	41
Total houses empty .....	119	188	194

No New Houses were built during the year.

Forty-four of the houses empty were amongst the worst type on the black list under the Housing and Town Planning Act, and a great number of the remainder were amongst the poorest type of cottages. This showed a disposition on the part of the occupiers to remove to a better and more sanitary house when the opportunity presented itself.

### DIRTY HOUSES.

In the reports submitted to the Committee for the months of March, July, and August, details were given of certain houses in Gordon Street, Quaker Lane, Cotton Hall Street, Richard Street, and William Street, which were in a filthy condition. Preliminary and, ultimately, Statutory Notices were served upon the occupiers, and they were cleansed at once.

Only one house, situated in Richard Street, was found to be overcrowded. A Statutory Notice was served, and the family removed to a larger house.

### INFECTIOUS DISEASES NOTIFIED

WARD	Scarlet Fever		Typhoid Fever		Diph- theria		Erysi- pelas		Cerebro Spinal Meningitis		Con- sumption		Opthalmia Neo- natorum		Measles & German Measles		Puerperal Fever		Total	
	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918
West-Central.	4	0	1	0	0	0	1	2	0	0	4	5	0	0	7	96	0	1	17	105
North-East	17	9	2	0	0	2	3	2	0	1	13	13	4	0	35	152	0	0	70	179
North-West	12	3	1	0	2	2	2	3	0	0	11	4	0	0	23	157	0	0	51	169
Total ...	33	12	4	0	2	4	6	7	0	1	28	22	0	1	65	405	0	1	138	453

Immediately upon receipt of notification of the existence of cases of Infectious Disease I visited the houses and ascertained if the patients were properly isolated. I also made a thorough examination of the premises. Any defects discovered in the drainage or sanitary arrangements I caused to be remedied as quickly as possible. Eight, or 66.0 per cent. of the patients suffering from Scarlet Fever were removed to the Bull Hill Hospital. Two patients suffering from Influenza were also taken to Hospital.

At the termination of each case of infectious disease, the rooms were thoroughly cleansed and disinfected, and the bedding, etc., removed to Bull Hill Hospital and disinfected in the Super-heated Steam Disinfector.

During the year loads of bedding, etc., were disinfected.

### GENERAL INSPECTION OF DISTRICT.

In accordance with your instructions and the General Order of the Local Government Board, I have endeavoured, by systematic inspection, to keep myself informed in respect of any nuisance existing in the district, as the following summary will show :—



## SUMMARY OF WORK DONE IN THE DISTRICT.

Total number of Nuisances discovered in District.....	202
Letters written respecting Nuisances .....	76
Preliminary Notices served respecting Nuisances .....	163
Legal Notices served respecting Nuisances.....	23
Number of Re-Inspections.....	758
„ Nuisances abated (including outstanding Nuisances in 1917).....	183
„ Houses and Premises Inspected .....	910
„ Inspections of Refuse Tips .....	73
„ Inspections of Schools and Public Buildings .....	125
Complaints Received and Investigated .....	116
Number of Drains, Water Closets, &c., Tested .....	32
„ Smoke Observations Taken .....	51
„ Inspections of Factories and Workshops .....	133
„ „ Lodging-Houses.....	56
„ „ Bake-Houses .....	110

### BLACK SMOKE NUISANCE.

The nuisance arising from the emission of Black Smoke from Factory Chimneys has again received my attention. Fifty-one observations were taken, each of one hour's duration. According to the arrangement of the Cotton Control Board, several of the mills worked intermittently during the year.

The following time limit is in force in the Borough :—

One, two, or three boilers.....	5 minutes black smoke per hour.
Four or more boilers .....	7 „ „

The following Table of Analysis of Observations shows the average amount of black smoke emitted in minutes per hour during the last 12 years :—

1918.	1917.	1916.	1915.	1914.	1913.	1912.	1911.	1910.	1909.	1908.	1907
2.70	2.24	2.36	2.60	2.08	2.11	1.91	2.22	2.12	2.43	2.18	2.15

Advantage has been taken of the opportunity afforded by the mills being closed, and repairs to boilers and stoking apparatus have been carried out.

At 15 of the mills the boilers are hand fired.

At 30 of the mills mechanical stokers of various kinds are in use, and there are 68 boilers at the respective mills, etc.

## SUMMARY OF INSPECTIONS

### Northern District

Number and Nature of Inspections made	No.	Notices Served		Nuis'nc's Abated	Nuis'nc's remain- ing in hand
		Legal	Prelim-inary		
Dwelling-houses .....	910	...	...	...	...
„    under Town Planning Act	48	...	...	...	...
Factories and Workshops .....	133	4	4	...	...
Dairies and Cowsheds.....	62	12	8	12	4
Bakehouses .....	110	2	6	6	...
INFECTIOUS DISEASES :—					
Cases Visited .....	453	...	...	...	...
Rooms Disinfected .....	49	...	...	...	...
Loads of Bedding Removed .....	61	...	...	...	...
Inspection of Refuse Tips.....	73	...	...	...	...
Smoke Observations .....	51	...	...	...	...
NUISANCES.					
Defective Drains.....	30	2	28	26	4
„    Slop Gullies .....	17	...	17	14	3
„    Soilpipes, W.C.'s, etc. ....	19	2	17	17	2
„    Troughs and Downspouts...	41	4	40	16	25
Insanitary Yards.....	1	...	1	1	...
Dirty Houses, etc. ....	6	3	...	5	1
Dirty Closets .....	6	...	6	5	1
Accumulation of Refuse.....	6	...	6	5	1
Nuisance from Animals .....	1	...	1	1	...
Dangerous Buildings .....	2	...	2	2	...
Ashtubs without covers .....	5	...	5	4	1
Broken Slop-pipes .....	14	...	10	14	...
Choked Waste Water Closets .....	35	...	35	33	2
Insufficient Ventilation of Rooms ...	4	4	4	3	1
Dirty Bedding.....	2	2	2	2	...
Choked Sewers.....	4	...	4	4	...
Burst Water Pipes .....	8	...	8	8	...
Defective Gas Pipes .....	1	...	1	1	...

### HOUSING AND TOWN PLANNING ACT, 1909.

#### (INSPECTION OF DISTRICT) REGULATIONS, 1910.

During the year 48 houses were inspected.

Number of houses specially inspected under Section 17 of 1909 Act, with a view to ascertaining whether they were unfit for habitation—48.

Many of the poorer-class houses were empty during the year, and no action was taken under the above Acts.



## DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 36 farms, with 67 shippens, in the Northern District. No dairy cows have been kept during the year at Sniddle Hill, Holly Bank, and Hawkshaw Farms. A few of the farms are used chiefly for rearing young stock. About 500 cows are stalled in the shippens, in addition to young stock and oxen. Improvements were carried out under the Dairies, Cowsheds, and Milkshops Regulations, as follows :—

Shippens Pavement Relaid or Repaired.....	1
Lighting and Ventilation of Shippens Improved.....	2
Drains Reconstructed or Repaired.....	2
New Easing Troughs and Downspouts Fixed.....	3
Dirty Shippens Limewashed .....	8
Repairs to Roofage of Shippens .....	2

Many repairs of a minor nature were also carried out.

I have continued to watch carefully the water supplies at the various farms.

Copies of the Dairies, Cowsheds, and Milkshops Regulations have again been supplied to each farmer.

## INSPECTION OF SCHOOLS.

Many Inspections of the 13 Elementary Schools, particularly during the vacations, viz., Easter, Mid-Summer, and Christmas, to survey the buildings and ascertain if the cleaning had been done in accordance with your requirements, as issued prior to each vacation by Mr. W. Bretterick, Secretary of Education. I found the work done in accordance with instructions. Defects in the buildings, drainage, and pavement of yards were remedied.

## TRIPERIES.

The waste material from the works is removed daily and cremated at the Destructor, and great care is exercised to avoid effluvia nuisances. I visit the works very often.

There is one gut scraper in the town, and his workshop, which is well kept, is situated at the Public Slaughter-Houses.

## FACTORIES AND WORKSHOPS.

### I.—INSPECTION.

Premises.	Number of Inspec- tions.	Written Notices.
Factories .....	26	3
Workshops .....	102	2
Workplaces .....	5	0
	<hr/>	<hr/>

## NUISANCES UNDER PUBLIC HEALTH ACTS.

### II.—DEFECTS FOUND.

	Number of Defects.	
	Found.	Remedied
Want of Cleanliness .....	1	1
„ Drainage of Floors and Choked Drains .....	2	2
Other Nuisances .....	1	1
Choked Closets .....	1	1
Sanitary Conveniences—		
Unsuitable and Defective .....	0	0
Not Separate for Sexes .....	0	0
	5	5

### III.—OTHER MATTERS.

Matters Notified to H.M. Inspectors of Factories .....	0
Action taken in matters referred by H.M. Inspector, as remediable under Public Health Acts (notified by H.M. Inspector) .....	0
Not under Factory and Workshop Acts (Report of Action sent to H.M. Inspector) .....	0
Others .....	0
Certified Underground Bake-Houses in use at end of year .....	2

### IV.—REGISTERED FACTORIES AND WORKSHOPS.

	Number.
Textile Factories .....	32
Non-Textile Factories .....	36
Factory Workshops .....	44
Workshops .....	166
Workplaces .....	9
	287

Four lists of outworkers making wearing apparel were supplied to me during the year in compliance with the regulations.

### FOOD INSPECTION.

I have continued to keep a sharp outlook over the various articles of food offered for sale for human consumption in the district, and inspected the hawkers carts. I have had no cause for complaint.



## MODEL LODGING-HOUSE.

Since August, 1914, there has been a reduction in the number of lodgers, owing to many reservists and other men lodgers joining the Army, and in order to effect a saving in regard to heating, lighting, and cleaning, general wear and tear, we closed down the two top rooms—containing 66 cubicles—during the early part of 1917. The cubicles, wells, beds, etc., have been disinfected when necessary. I have visited the house frequently during the day-time and often late in the evening, when I have checked the books. On each occasion everything has been in order. This is the only Common Lodging-House in the district—a distinct advantage from a health point of view, as lodgers are brought together under one roof and, therefore, more directly under our supervision.

The following Table shows the average number of occupants for each month during the last 12 years :—

	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Jan. ....	80.5	77.2	76.0	70.2	75.2	72.1	111.3	121.0	84.6	65.3	59.1	53.04
Feb.....	81.2	87.9	74.9	76.2	64.1	77.1	125.2	126.6	86.9	69.1	61.2	54.82
March ...	93.2	87.2	73.2	70.2	80.4	95.3	127.2	125.6	85.5	67.2	66.3	53.58
April ....	95.1	88.2	79.5	79.2	86.5	102.6	127.4	129.4	109.2	67.2	68.2	57.77
May ..... 86.1	90.2	83.2	79.2	78.0	96.0	126.2	127.2	88.2	53.1	66.9	54.35	
June ..... 82.2	93.2	79.2	78.1	71.5	86.1	131.8	122.3	84.1	50.7	62.2	55.37	
July..... 84.3	85.9	84.1	78.7	69.2	77.1	130.1	124.1	75.7	53.1	60.0	51.26	
August ... 86.1	80.5	81.9	72.1	70.2	91.5	132.9	108.1	73.2	62.1	57.2	48.00	
Sept. .... 97.2	74.7	87.0	70.2	79.2	104.2	123.1	91.1	66.1	60.2	56.7	53.93	
October... 90.2	76.9	74.2	72.6	82.1	113.5	128.1	94.2	58.1	60.6	57.7	54.90	
Nov. .... 92.2	72.1	74.1	79.6	79.1	109.1	124.2	87.2	61.2	60.0	54.7	56.47	
Dec..... 78.3	69.1	80.1	78.2	75.2	108.9	122.4	79.2	64.9	61.1	51.7	59.19	
Average .	87.2	81.9	78.9	75.3	77.5	94.4	125.8	111.3	78.1	60.8	60.0	54.39

## MANURE PITS.

I made an inspection during the months of May, June, July, of the 38 Midden Steads in use in the Northern District, and caused the pits to be emptied weekly. Everything possible was done to mitigate the nuisance caused by flies.

## OTHER MATTERS.

At each monthly meeting of the Health Committee, in addition to the printed report, I have submitted a detailed type-written statement of the work carried on in my district.

I am pleased to say that the service of Preliminary and Legal Notices had the effect of securing the abatement of nuisances, and it was not necessary to institute legal proceedings in any case.

Agreement Forms have been signed by owners of property for the Corporation workmen to carry out repairs, etc., to back yards, drains, etc., etc.

This work has been done under my supervision.

I am, Gentlemen,

Yours obediently,

C. R. WALSH, M. R. San. Inst., &c.,

Sanitary Inspector, &c.



SUPERINTENDENT'S OFFICE,

CLEANSING DEPARTMENT.

To the Chairman and Members of the Health Committee,

GENTLEMEN,

I beg to submit to you my Annual Report for the year January 1st to December 31st, 1918.

The following is a Summary of Work done from January 1st to December 31st, 1918 :—

	Tons.	Cwts.	Qrs.
House Refuse to Destructor .....	12265	6	2
Market Garbage to Destructor .....	215	17	2
Slaughter Garbage to Destructor .....	44	17	0
	12526	1	0
Clinker Removed from Destructor.....	3667	Loads.	
Excreta to Sewage Works .....	2044	„	
Sweepings to Various Tips .....	2261	„	
Sweepings Deposited by Handcarts at Destructor	2574	„	
Gully Wreck to Various Tips .....	926	„	
Water Deposited on Streets .....	740	„	
Snow Removed from Streets .....	217	„	
Length of Streets Swept by Machine .....	14	Miles.	
Length of Streets Swept by Hand .....	2678 $\frac{3}{4}$	„	
Streets Gullies Emptied .....	21682		
Excreta Pails Emptied .....	89936		
Ashes Tubs Emptied .....	321625		
Ashpits Emptied .....	880		
Ashtubs Added during the Year .....	6		
Pails brought in from Closet Conversions .....	2		

Yours obediently,

JOSEPH NICCOLL,

Cleansing Superintendent,

## REPORT OF THE SLAUGHTER-HOUSES, 1918.

To the Chairman and Members of the Slaughter-House Committee.

GENTLEMEN,

I herewith present to you, for your consideration, my Report for the year ending December, 1918, showing the number of Cattle, &c., slaughtered.

### PUBLIC ABBATOIRS.

	1918.	1917.
Beasts .....	553	1405
Sheep .....	4936	6629
Calves .....	18	40
Swine .....	190	347
	<hr/> 5697	<hr/> 8421

Showing a decrease for the year of 2725.

### PRIVATE PREMISES.

	1918.	1917.
Beasts .....	359	704
Sheep .....	3072	3202
Calves .....	0	40
	<hr/> 3431	<hr/> 3946

Showing a decrease for the year of 515.

### TRIPERIES.

The amount of work done was much less, on account of the scarcity.

### TUBERCULOSIS.

There were 20 beasts and 6 pigs affected with this disease. Two of the beasts were condemned and destroyed. Internal organs were destroyed from 18 beasts and 6 pigs.

### BUTCHERS' VANS.

There were none in use during the year.

### MEAT UNFIT FOR FOOD.

Two Beasts, 6 Sheep, 1 Pig, and 1 Calf, and 2 tons 6 cwt. Offal were destroyed as unfit for food. This was less than in the previous year.

### LICENSES ISSUED.

I issued Slaughtering Licenses to farmers and others for 2 Beasts, 20 Swine, and 2 Calves. These were inspected and found good, excepting 1 Beast at Bury Fold Farm, which was destroyed.

I am,

Yours obediently,

WILLIAM BICKERSTAFFE,

Meat and Shops Inspector.



